

PROVIDING FOR CONSIDERATION OF THE BILL (H.R. 4447) TO ESTABLISH AN ENERGY STORAGE AND MICROGRID GRANT AND TECHNICAL ASSISTANCE PROGRAM; PROVIDING FOR CONSIDERATION OF THE BILL (H.R. 6270) TO AMEND THE SECURITIES EXCHANGE ACT OF 1934 TO REQUIRE ISSUERS TO MAKE CERTAIN DISCLOSURES RELATING TO THE XINJIANG UYGHUR AUTONOMOUS REGION, AND FOR OTHER PURPOSES; AND PROVIDING FOR CONSIDERATION OF THE BILL (H.R. 8319) MAKING CONTINUING APPROPRIATIONS FOR FISCAL YEAR 2021, AND FOR OTHER PURPOSES.

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September 21, 2020.—Referred to the House Calendar and ordered to be printed.

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MR. MCGOVERN, from the Committee on Rules, submitted the following

## R E P O R T

[To accompany H. Res. \_\_]

The Committee on Rules, having had under consideration House Resolution \_\_\_\_, by a record vote of 7 to 3, report the same to the House with the recommendation that the resolution be adopted.

### SUMMARY OF PROVISIONS OF THE RESOLUTION

The resolution provides for consideration of H.R. 4447, the Clean Economy Jobs and Innovation Act, under a structured rule. The resolution provides 90 minutes of general debate equally divided among and controlled by the chair and ranking minority member of the Committee on Energy and Commerce and the chair and ranking minority member of the Committee on Science, Space, and Technology. The resolution waives all points of order against consideration of the bill. The resolution provides that an amendment in the nature of a substitute consisting of the text of Rules Committee Print 116-63, modified by the amendment printed in Part A of this report, shall be considered as adopted and the bill, as amended, shall be considered as read. The resolution waives all points of order against provisions in the bill, as amended. Section 2 of the resolution provides that following debate, each further amendment printed in part B of this report

not earlier considered as part of amendments en bloc pursuant to section 3 shall be considered only in the order printed in this report, may be offered only by a Member designated in this report, shall be considered as read, shall be debatable for the time specified in the report equally divided and controlled by the proponent and an opponent, may be withdrawn by the proponent at any time before the question is put thereon, shall not be subject to amendment, and shall not be subject to a demand for division of the question. Section 3 of the resolution provides that at any time after debate the chair of the Committee on Energy and Commerce or his designee may offer amendments en bloc consisting of further amendments printed in part B of this report not earlier disposed of. Amendments en bloc shall be considered as read, shall be debatable for 20 minutes equally divided and controlled by the chair and ranking minority member of the Committee on Energy and Commerce or their designees, shall not be subject to amendment, and shall not be subject to a demand for division of the question. The resolution waives all points of order against the amendments printed in part B of this report and amendments en bloc described in section 3. The resolution provides one motion to recommit with or without instructions. The resolution provides for consideration of H.R. 6270, the Uyghur Forced Labor Disclosure Act of 2020, under a closed rule. The resolution provides one hour of general debate equally divided and controlled by the chair and ranking minority member of the Committee on Financial Services. The resolution waives all points of order against consideration of the bill. The resolution provides that an amendment in the nature of a substitute consisting of the text of Rules Committee Print 116-64 shall be considered as adopted and the bill, as amended, shall be considered as read. The resolution waives all points of order against provisions in the bill, as amended. The resolution provides one motion to recommit with or without instructions. The resolution provides for consideration of H.R. 8319, the Continuing Appropriations Act, 2021 and Other Extensions Act, under a closed rule. The resolution provides one hour of general debate equally divided and controlled by the chair and ranking minority member of the Committee on Appropriations. The resolution waives all points of order against consideration of the bill and provides that the bill shall not be subject to a question of consideration. The resolution provides that the bill shall be considered as read. The resolution waives all points of order against provisions in the bill. The resolution provides that clause 2(e) of rule XXI shall not apply during consideration of the bill. The resolution provides one motion to recommit.

#### EXPLANATION OF WAIVERS

The waiver of all points of order against consideration of H.R. 4447 includes waivers of the following:

- Clause 3(d)(1) of rule XIII, which requires the inclusion of committee cost estimate in a committee report. A CBO cost estimate on H.R. 4447 was not available at the time the Committee on Energy and Commerce filed its report.
- Clause 12(a)(1) of rule XXI, which prohibits consideration of a bill unless there is a searchable electronic comparative print that shows how the bill proposes to change current law.
- Clause 12(b) of rule XXI, which prohibits consideration of a bill unless there is a searchable electronic comparative print that shows how the text of

the bill as proposed to be considered differs from the text of the bill as reported.

The waiver of all points of order against provisions in H.R. 4447, as amended, includes waivers of the following:

- Clause 4 of rule XXI, which prohibits reporting a bill carrying an appropriation from a committee not having jurisdiction to report an appropriation.
- Clause 5(a) of rule XXI, which prohibits a bill or joint resolution carrying a tax or tariff measure from being reported by a committee not having jurisdiction to report tax or tariff measures.

Although the resolution waives all points of order against the amendments printed in part B of this report or against amendments en bloc described in Section 3 of the resolution, the Committee is not aware of any points of order. The waiver is prophylactic in nature.

The waiver of all points of order against consideration of H.R. 6270 includes waivers of the following:

- Section 103(i) of H. Res. 6, which prohibits consideration of a reported bill unless the committee report designates a hearing used to develop or consider the bill.
- Clause 12(a)(1) of rule XXI, which prohibits consideration of a bill unless there is a searchable electronic comparative print that shows how the bill proposes to change current law.

Although the resolution waives all points of order against provisions in H.R. 6270, as amended, the Committee is not aware of any points of order. The waiver is prophylactic in nature.

The waiver of all points of order against consideration of H.R. 8319 includes waivers of the following:

- Clause 10 of rule XXI, which prohibits consideration of a measure that has a net effect of increasing the deficit or reducing the surplus over the five- or 10-year period.
- Clause 11 of rule XXI, which prohibits consideration of a bill or joint resolution which has not been reported by a committee until such measure has been available to Members, Delegates, and the Resident Commissioner for 72 hours.
- Clause 12(a)(1) of rule XXI, which prohibits consideration of a bill unless there is a searchable electronic comparative print that shows how the bill proposes to change current law.
- Section 302(f)(1) of the Congressional Budget Act, which prohibits consideration of legislation providing new budget authority in excess of a 302(a) or 302(b) allocation of such authority.
- Section 311(a) of the Congressional Budget Act, which prohibits consideration of legislation that would cause the level of total new budget authority for the first fiscal year to be exceeded, or would cause revenues to be less than the level of total revenues for the first fiscal year or for the total of that first fiscal year and the ensuing fiscal years for which allocations are provided, except when a declaration of war by the Congress is in effect.

Although the resolution waives all points of order against provisions in H.R. 8319, the Committee is not aware of any points of order. The waiver is prophylactic in nature.

## COMMITTEE VOTES

The results of each record vote on an amendment or motion to report, together with the names of those voting for and against, are printed below:

### Rules Committee Record Vote No. 348

Motion by Mr. Cole to report an open rule for H.R. 4447 and H.R. 6270.  
Defeated: 3–7

Majority Members	Vote	Minority Members	Vote
Mr. Hastings.....		Mr. Cole.....	Yea
Mrs. Torres.....	Nay	Mr. Woodall.....	Yea
Mr. Perlmutter.....		Mr. Burgess.....	
Mr. Raskin.....	Nay	Mrs. Lesko.....	Yea
Ms. Scanlon.....	Nay		
Mr. Morelle.....	Nay		
Ms. Shalala.....	Nay		
Ms. Matsui.....	Nay		
Mr. McGovern, Chairman.....	Nay		

### Rules Committee Record Vote No. 349

Motion by Mr. Cole to amend the rule to H.R. 8319 to make in order amendment #5, offered by Rep. Conaway (TX), which extends the authority for the Pandemic EBT program and extends lending authority for the Commodity Credit Corporation. Defeated: 3–7

Majority Members	Vote	Minority Members	Vote
Mr. Hastings.....		Mr. Cole.....	Yea
Mrs. Torres.....	Nay	Mr. Woodall.....	Yea
Mr. Perlmutter.....		Mr. Burgess.....	
Mr. Raskin.....	Nay	Mrs. Lesko.....	Yea
Ms. Scanlon.....	Nay		
Mr. Morelle.....	Nay		
Ms. Shalala.....	Nay		
Ms. Matsui.....	Nay		
Mr. McGovern, Chairman.....	Nay		

Rules Committee Record Vote No. 350

Motion by Ms. Scanlon to report the rule. Adopted: 7-3

Majority Members	Vote	Minority Members	Vote
Mr. Hastings.....		Mr. Cole.....	Nay
Mrs. Torres.....	Yea	Mr. Woodall.....	Nay
Mr. Perlmutter.....		Mr. Burgess.....	
Mr. Raskin.....	Yea	Mrs. Lesko.....	Nay
Ms. Scanlon.....	Yea		
Mr. Morelle.....	Yea		
Ms. Shalala.....	Yea		
Ms. Matsui.....	Yea		
Mr. McGovern, Chairman.....	Yea		

SUMMARY OF THE AMENDMENT TO H.R. 4447 IN PART A  
CONSIDERED AS ADOPTED

1. Pallone (NJ): Makes several technical and conforming changes to the bill; adds findings and a report related to energy and water efficiency measures and energy savings performance contracts; amends prevailing wage and wage rate requirements in several sections of the bill; removes certain spending provisions related to public lands renewable energy development; clarifies that the focus of the methane hydrate research program is on risk assessment and mitigation of environmental impacts; clarifies the timing and application of eminent domain for pipeline projects; codifies a recent Department of Commerce agreement limiting importation of uranium from Russia into the United States; defers collection of fees and expands eligibility criteria for the DOE Title XVII Loan Program; adds a new requirement for EPA to establish a protocol for assessing and addressing the cumulative impacts of environmental stressors; and establishes a uniform definition of “apprenticeship” and “pre-apprenticeship” for the act.

SUMMARY OF THE AMENDMENTS TO H.R. 4447 IN PART B MADE IN  
ORDER

1. Axne (IA), Bustos (IL): Adds biofuels facilities as eligible for funding under the Carbon Capture Program. (10 minutes)
2. Barragán (CA), Beyer (VA), Lee, Barbara (CA), Raskin (MD), Velázquez (NY), Bonamici (OR), Huffman (CA), Lowenthal (CA), Clarke, Yvette (NY), Khanna (CA), Hastings (FL), Kennedy (MA): Establishes a \$1 billion dollar a year Climate Smart Ports program at EPA to provide grants for ports and port users to invest in zero emissions technology for cargo handling equipment, drayage trucks, and harbor craft. The program also supports the development of shore power and clean energy microgrids at ports. (10 minutes)
3. Barragán (CA): Increases the authorized appropriation by \$40,000,000 for FY 2021-2030 for the EPA's Environmental Justice Small Grants Program, Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program, and Community Action for a Renewed Environment grant programs I and II. (10 minutes)
4. Barragán (CA): Increases authorized appropriation levels by \$100,000,000 for the Weatherization Assistance Program for Fiscal Year 2021-2025. (10 minutes)
5. Barragán (CA): Establishes a climate justice grants program, administered by EPA, to provide local government and community non-profit grants to environmental justice communities for climate mitigation and climate adaptation projects. The authorized appropriation is \$1 billion a year for FY 2021-2025. (10 minutes)
6. Barragán (CA), Cárdenas (CA), McEachin (VA): Increases the authorized appropriation by \$50 million a year for FY 2021-2025 for the low-income solar grant program in Subtitle D. (10 minutes)
7. Blunt Rochester (DE): Funds clean energy and energy efficiency upgrades to critical infrastructure, like schools and hospitals. (10 minutes)

8. Brown (MD): Prohibits the use of certain hazardous substances linked to respiratory sensitization and asthma in thermal insulating materials for low income housing weatherization. (10 minutes)
9. Burgess (TX): Requires the Secretary of Energy to certify that this legislation will not reduce the United States' energy security or energy independence. (10 minutes)
10. Burgess (TX): Requires the Secretary of Energy to certify that this legislation will not increase electric rates or gasoline prices. (10 minutes)
11. Burgess (TX): Requires the Secretary of Interior to report to Congress on the use of forced labor practices to extract critical minerals from foreign sources for export to the United States. (10 minutes)
12. Burgess (TX): Requires the Secretary of Energy to report to Congress on the effect of variable and distributed energy resources on the reliability of the electric grid, specifically pertaining to natural disasters and physical or cyber attacks on the grid infrastructure. (10 minutes)
13. Burgess (TX): Requires the Secretary of Energy to report to Congress on the potential duplication of research efforts in the Department of Energy's applied energy programs, evaluate the opportunity costs associated with such efforts, and examine the impact of combining duplicated projects. Also requires recommendations on streamlining research grant process. (10 minutes)
14. Castor (FL): Adds emissions reduction and climate change mitigation to DOE's R&D mission. (10 minutes)
15. Castor (FL): Directs the Secretary of Energy to engage the National Academies for a study to identify barriers to equitable distribution of the benefits of clean energy to frontline communities. (10 minutes)
16. Clarke, Yvette (NY): Establishes a pilot program within the Environmental Protection Agency to award funds in the form of grants, rebates and low-cost revolving loans to projects that either (1) replace an existing diesel-powered transport refrigeration unit in a heavy-duty vehicle with an electric unit; or (2) purchase and install shore power infrastructure or related equipment that enables electric transport refrigeration units to operate on grid electricity at places where refrigerated heavy-duty vehicles congregate, such as distribution centers. (10 minutes)
17. Cleaver (MO), McKinley (WV): Directs the Secretary of Energy to establish a grant program for tree planting to reduce residential energy consumption. The Secretary should award sufficient grants each year to plant not less than 300,000 trees a year until 2025. (10 minutes)
18. Cox (CA): Adds agricultural applications, such as solar powered smart agricultural monitoring and irrigation systems, as an eligible solar energy research subject area. (10 minutes)
19. DeGette (CO), Perlmutter (CO): Requires EPA to identify 100 environmental justice communities overburdened by pollution violations and implement strategies for ending the violations. (10 minutes)
20. Delgado (NY): Requires the Department of Labor and the Department of Energy to project the current and future workforce needs and shortages within the clean energy technology industry. (10 minutes)
21. DeSaulnier (CA): Establishes a Department of Energy, in coordination with the Department of Labor, grant program for local communities to develop transition plans for their fossil fuel workforce to more sustainable jobs or sectors. (10 minutes)
22. Dingell (MI), Walberg (MI): Amends the Energy Policy and Conservation Act to modify and make technical changes to the definition of water heater under energy conservation standards. (10 minutes)
23. Doggett (TX), Raskin (MD), Cisneros (CA), Beyer (VA), Huffman (CA),

Porter (CA), Pocan (WI), Barragán (CA), Casten (IL): Direct the National Academy of Sciences to conduct a study to evaluate the efficacy of carbon capture technology and to identify industries where energy efficiency is most enhanced by the addition of carbon capture technology. (10 minutes)

24. Escobar (TX): Requires the Department of Energy to give special consideration to minority-serving institutions, or a multi-institutional consortium which includes a minority-serving institution, when awarding grants, contracts, or cooperative agreements for solar energy research and development programs. (10 minutes)
25. Finkenauer (IA): Provides labor standards for clean energy projects being funded in whole or in part by provisions of this bill. (10 minutes)
26. Garamendi (CA), Lowenthal (CA): Clarifies that offshore wind projects on the Outer Continental Shelf are indeed subject to jurisdiction of the U.S. Constitution and applicable federal laws, as offshore oil/gas rigs are currently. House passed this language by voice vote in 112th Congress (see H.R. 2360). (10 minutes)
27. Golden (ME): Incorporates biomass systems into the Distributed Renewable Energy section of the bill, as well as the energy workforce development and grant program sections. (10 minutes)
28. Graves, Garret (LA): Requires the Secretary of Energy to identify the ability to source necessary critical minerals necessary for solar energy production. (10 minutes)
29. Graves, Garret (LA): Requires actions under emissions reduction road map to be cost-competitive in developing countries as well. (10 minutes)
30. Graves, Garret (LA): Requires a report on the increase or decrease in net imports of critical minerals as a result of actions taken in section 5302. (10 minutes)
31. Haaland (NM), Gallego (AZ): Ensures that the HA-LEU program created in the bill will not negatively impact the natural or cultural resources of Tribal communities or Native Nations or degrade ground or surface water quality as a result of uranium mining. (10 minutes)
32. Haaland (NM), Tlaib (MI), Ocasio-Cortez (NY): Increases authorizations for renewable energy R&D accounts by 50% and adds an authorization for total funding for research, development, demonstration and commercialization activities for EERE. (10 minutes)
33. Harder (CA): Directs the Secretary of Energy to generate a map that maps wildfire risk around utilities to allow for better planning for grid hardening, vegetation management, and emergency access points, among other things. (10 minutes)
34. Harder (CA): Requires the Centers of Excellence to consider the public health effects of wildfire smoke on outdoor workers, strengthens research and outreach, requires collaboration between centers and grantees, and sets a standard for determining Centers. (10 minutes)
35. Hayes (CT), Cárdenas (CA): Amends Section 6201, the Reauthorization of the Clean School Bus Program. Reserves \$100 million of \$130 million per fiscal year between 2021-2025 for awards to eligible recipients proposing to replace school buses with zero-emission school buses. (10 minutes)
36. Hayes (CT), Trahan (MA): Ensures nothing in this bill would affect the safety and well being of children in carrying out the projects, programs, and other applicable items in this Act or affect the enforcement of child labor and forced labor laws. (10 minutes)



37. Huffman (CA): Ensures that harmed Indian Tribes have an opportunity to address the Klamath Hydroelectric Project's historic and ongoing damages to tribal and fishery resources, and that any annual license includes comprehensive studies of the facility's impacts. (10 minutes)
38. Kuster (NH): Doubles funding to \$40,000,000 for the Energy Workforce Development program, which will help schools and workforce programs train the next generation of energy workers. (10 minutes)
39. Lamb (PA), Trahan (MA): Authorizes fusion research program. (10 minutes)
40. Lamb (PA): Authorizes milestone-based nuclear demonstration projects. (10 minutes)
41. Lamb (PA): Authorizes produced water research, development, and demonstration program. (10 minutes)
42. Larsen, Rick (WA): Directs the U.S. Department of Transportation to catalog climate change mitigation efforts in U.S. aviation and aerospace, identify barriers to adoption and serve as a roadmap for U.S. aviation to meet emission reduction goals. (10 minutes)
43. Lee, Susie (NV), Tonko (NY): Amends subtitle C of Title II to facilitate a streamlined process for the local permitting of distributed energy systems. (10 minutes)
44. Levin, Andy (MI), Ocasio-Cortez (NY): Amends various programs under subtitle E – EV Infrastructure by expanding on the definition of “underserved or disadvantaged community” used under this subtitle; ensuring EV supply equipment listed as eligible for the rebate program is ADA compliant; requiring identification of nearby existing publicly available EV supply equipment in the EV infrastructure rebate program application; requiring the Secretary of Energy in developing standards for an electric vehicle charging network to provide considerations for addressing range anxiety and the need for a nationwide network of EV charging infrastructure; and ensuring State Energy Transportation Plans include considerations for statewide networks of EV charging infrastructure and modernization to electric grids to be powered by renewable energy sources. (10 minutes)
45. Levin, Andy (MI): Directs the Secretary of Labor, in consultation with the Secretary of Energy, and acting through the Bureau of Labor statistics to collect and analyze labor market data to track workforce trends resulting from renewable energy and energy efficiency technology initiatives. Authorizes appropriations of \$10,000,000 for each fiscal years 2021 through 2025 to carry out this section. (10 minutes)
46. Levin, Mike (CA), Bonamici (OR), Neguse (CO): Establishes a program to improve wildfire smoke emissions modeling and to develop smoke forecasts. Directs the Environmental Protection Agency to collect data and coordinate research on the impacts of acute air pollution exposure from wildfires. (10 minutes)
47. Lipinski (IL): Requires the Secretary of Energy to carry out a research program on effects of exposure to low-dose radiation. (10 minutes)
48. Loeb sack (IA), Velázquez (NY): Establishes a grant program within DOE for the purpose of making energy efficiency and renewable energy improvements at public school facilities. (10 minutes)
49. Lowenthal (CA): Requires the Department of Interior to create an online database to annually report the type of energy and emissions produced on federal public lands. (10 minutes)

50. Lucas (OK): Expresses the sense of Congress that in order to reduce emissions and meet 100 percent of the power demand in the United States through clean, renewable, or zero emission energy sources while maintaining U.S. leadership in science and technology, the Secretary of Energy must prioritize funding for fundamental research, and research and development infrastructure. (10 minutes)
51. Lucas (OK): Expresses the sense of Congress that in order to reduce emissions and meet 100 percent of the power demand in the United States through clean, renewable, or zero emission energy sources while maintaining U.S. competitiveness in science and technology, the U.S. must prioritize investment in domestic energy sources and supply chains, as well as investment in the research and development of exportable next-generation energy technologies. (10 minutes)
52. Lujan (NM), Castor (FL): Supports the growth of local solar energy by making community solar more accessible to all consumers and ratepayers, including lower-income consumers, by requiring states to consider enacting policies to allow community solar projects. (10 minutes)
53. McNerney (CA), Bonamici (OR): Directs the National Institute of Standards and Technology (NIST) to collect data following wildfires in the wildland-urban interface related to the influence of building materials on structural fires and how wind, terrain, and moisture affect wildland fires. NIST would also be required to conduct research on and develop metrics for economic outcomes associated with wildland-urban interface fire mitigation. (10 minutes)
54. Mucarsel-Powell (FL): Directs the Secretary to support research and development of underground transmission and distribution lines to lower costs and improve reliability and safety. (10 minutes)
55. Norcross (NJ), McKinley (WV): Creates a rebate program for energy efficient electrotechnologies upgrades. (10 minutes)
56. Norcross (NJ): Allows grant funds for Building efficiency and resiliency to be used to make an addition or alteration to, or to install, replace, or provide maintenance to, an air filtration and purification system of an HVAC system to help prevent the spread of COVID-19. All laborers and mechanics employed in the process of the project must be paid prevailing wages. (10 minutes)
57. Ocasio-Cortez (NY): Strikes section 3109 on methane hydrates. (10 minutes)
58. O'Halleran (AZ): Reauthorizes and increases funding for Section 609 "Rural and Remote Communities Electrification Grants" under the Public Utility Regulatory Policies Act (PURPA) to assist the economic transition of rural and distressed communities impacted by the downturn of coal-fired power generation. Grants available under this section may be used to increase energy efficiency, upgrade transmission or distribution lines, or modernize electric generation facilities in rural and distressed communities, with an emphasis on renewable energy. (10 minutes)
59. O'Halleran (AZ): Directs the Department of Energy to establish a "Coal Community Resource Clearinghouse" for the purpose of increasing awareness of Federal and State programs, grants, loans, and technical assistance resources DOE determines could assist economic development and transition activities in communities impacted by the downturn of coal-fired power generation. (10 minutes)
60. Omar (MN): Requires the Administrator to establish and carry out a program to award grants, on a competitive basis, to eligible entities for projects that are consistent with zero-waste practices. (10 minutes)
61. Omar (MN): States that the Secretary of the Treasury, shall submit to Congress a report that contains— (1) an identification of any existing

fossil fuel production subsidies not eliminated by this Act, or the amendments made by this Act; and (2) a quantification of the economic costs of such subsidies. (10 minutes)

62. Panetta (CA), LaMalfa (CA), Costa (CA), Garamendi (CA), Harder (CA), Carbajal (CA): Directs the Secretary of Energy to establish a critical infrastructure and microgrid research program. (10 minutes)
63. Panetta (CA), LaMalfa (CA), Costa (CA), Garamendi (CA), Carbajal (CA): Expands financial assistance for weatherization enhancement and innovation to cover the use of materials that are resistant to high heat and fire in dwellings occupied by low-income persons in areas at risk from drought and wildfires. (10 minutes)
64. Perlmutter (CO): Modifies the definition of energy storage to broaden its scope. (10 minutes)
65. Peters (CA): Establishes an interagency task force to create an action plan to reduce super pollutants based on policy recommendations provided by the Intergovernmental Panel on Climate Change, U.S. Climate Alliance, and other relevant agencies. (10 minutes)
66. Peters (CA): Directs EPA, DOE and other relevant agencies to develop a comprehensive plan to reduce black carbon emissions from the international shipping industry through its membership in the International Maritime Organization (IMO), including binding limits on black carbon as part of the Polar Code. (10 minutes)
67. Peters (CA): Requires the DOE to release the Interconnections Seams Study, which may support efforts to increase renewable energy transmission, and has reportedly been held and/or altered for political reasons. (10 minutes)
68. Pingree (ME), Spanberger (VA): Includes agricultural and grazing practices and forest management and afforestation as priorities in the Department of Energy's carbon removal program. (10 minutes)
69. Pingree (ME): Includes research and development that reduces impacts on existing ocean uses and increases coordination between offshore wind and existing users, including the commercial fishing industry, as purposes of the Department of Energy's wind energy research and development grant program. (10 minutes)
70. Plaskett (VI), Lieu (CA), San Nicolas (GU): Establishes a Department of Energy grant program for investments in renewable energy systems, energy efficiency activities, energy storage, smart grids, or microgrids in territories of the United States, as well as for training local residents. Grants would be awarded to non-profit organizations and the Department of Energy's National Laboratories may provide technical assistance. (10 minutes)
71. Pocan (WI): Reauthorizes the EPA State Indoor Radon Grant (SIRG) Program. (10 minutes)
72. Quigley (IL): Directs GSA to incorporate, to the extent practicable, features, practices, and strategies to reduce bird fatality resulting from collisions with public buildings. (10 minutes)
73. Quigley (IL): Establishes an Advanced Energy Technology Research Initiative at FERC to reform power system modeling and update grid services and grid operator software, and authorizes studies on advanced energy and electric grid efficiency. (10 minutes)
74. Rouda (CA): Suspends preemption for federal appliance and equipment efficiency standards when DOE misses deadlines to update such standards. (10 minutes)
75. Rush (IL): Requires the Secretary of Energy to establish an energy jobs council. The council shall conduct a survey of energy employers and produce annually an energy and employment report. (10 minutes)
76. Schrader (OR): Establishes the Home Wildfire Risk Reduction Rebate

program, to provide rebates to homeowners to defray the costs of retrofitting an existing home to be wildfire-resistant. (10 minutes)

77. Schweikert (AZ): Requires the Secretary of Energy to conduct a study on the benefits of blue hydrogen technology and how that can further enhance the deployment and adoption of carbon capture and storage. (10 minutes)
78. Scott, Bobby (VA), Murphy, Stephanie (FL): Supports the use of modeling and simulation tools to more efficiently design, site, permit, manufacture, construct, operate, maintain, and decommission wind energy systems. (10 minutes)
79. Scott, Bobby (VA): Supports research on the recovery of critical materials used in wind energy systems. (10 minutes)

80. Sherrill (NJ): Provides explicit direction for DOE to conduct RD&D on ways to reduce siting and permitting issues associated with potential impacts of wind power systems on air traffic control, air defense, and weather radar systems (10 minutes)
81. Stevens (MI), Dingell (MI): Directs the Secretary to establish a program of research, development, and demonstration activities on more efficient and sustainable materials, technologies, and processes for the manufacture, development, and use of the passenger and commercial vehicles. (10 minutes)
82. Thompson, Mike (CA), Huffman (CA), Garamendi (CA), Panetta (CA): Establishes a reliability standard, within the Federal Power Act, regarding extreme weather events. Directs the Department of Energy (DOE) to create a program and publish a report for states and local utilities on ways to improve the resiliency of their electrical grids. (10 minutes)
83. Thompson, Mike (CA), Horsford (NV), Horn (OK): Clarifies that energy use avoided through the use of geothermal pump technology is considered renewable energy produced for the purposes of this bill. (10 minutes)
84. Tlaib (MI): Requires the EPA to conduct a study to evaluate the disparate health impacts of emissions from fossil fuel facilities on minority and low and moderate income communities. Requires EPA to report to congress a summary of the study conducted. (10 minutes)
85. Tonko (NY): Requires the EPA Administrator to enter into an agreement with the National Academy of Sciences to assess methods for life cycle greenhouse gas emissions analyses for low-carbon transportation fuels. (10 minutes)
86. Waters (CA): Requires the Secretary of Transportation's report on electric vehicle (EV) charging station infrastructure in underserved communities to identify the potential for, and obstacles to, recruiting and entering into contracts with locally-owned small and disadvantaged businesses, including women- and minority-owned businesses, to deploy EV charging infrastructure in these communities. (10 minutes)
87. Waters (CA): Encourages institutions of higher education that receive grants for the construction of training and assessment centers to identify and consider qualified diverse candidates during the procurement process. (10 minutes)
88. Waters (CA): Requires the Secretary of Energy to evaluate, on state applications for "State Leadership Grants," which support the implementation of smart manufacturing technology, whether proposed projects will benefit diverse communities. (10 minutes)
89. Waters (CA): Expands the Home Energy Savings Retrofit Rebate Program to include multifamily housing. (10 minutes)
90. Wild (PA), Jeffries (NY): Requires the Secretary of Energy, in consultation with the Secretary of Labor, to establish a program to provide competitive grants to eligible entities to pay for pre-apprenticeship training for individuals or on-the-job training of a new or existing employee. (10 minutes)
91. Wilson, Joe (SC): Evaluates potential demonstration sites across the Department of Energy complex under Advanced Nuclear Reactor Research, Development, Demonstration, and Commercial Application Program. (10 minutes)

92. Bera (CA): Directs the Secretary of Energy to support R&D on tools and technologies for improving electric grid and energy sector safety and resilience during concurrent or co-located severe weather events. (10 minutes)
93. Blumenauer (OR): Requires the Secretary of Energy to file a report to the committees of jurisdiction documenting funds spent under the Light Water Reactor Sustainability program, and creates an advisory committee to submit an annual report to the relevant committees outlining the progress of the this program. (10 minutes)
94. DeGette (CO): Updates the methane waste prevention rules of the Bureau of Land Management. (10 minutes)
95. Krishnamoorthi (IL): Requires the public awareness campaign to include projected environmental impact, and information on how to find more information on the grant. (10 minutes)
96. Clark, Katherine (MA): Creates a task force led by the Secretary of Energy, which would be tasked with creating a report identifying tools that the Federal Government can use to advance the deployment of carbon dioxide removal projects. (10 minutes)
97. Blunt Rochester (DE): Creates a competitive grant program at EPA to incentivize ports to create and implement climate action plans. (10 minutes)
98. Lujan (NM), Wilson, Joe (SC), Casten (IL), Torres Small, Xochitl (NM): Creates a congressionally-authorized Department of Energy foundation to support the Department's energy missions and to increase collaboration to accelerate the commercialization of energy technologies. (10 minutes)

PART A—TEXT OF AMENDMENT TO H.R. 4447 CONSIDERED AS  
ADOPTED

Page 2, in the table of contents, after the matter relating to section 1602, insert the following:

Sec. 1603. Application of Wage Rate Requirements to the Weatherization Assistance Program  
Page 4, amend the item relating to section 2523 to read as follows:

Sec. 2523. Wind energy demonstration and validation projects.

Page 4, in the item relating to part 4, strike “Act”.

Page 7, in the item relating to section 6601, strike “registered” and insert “legal for operation on a street or highway”.

Page 7, in the item relating to the second section 8104 (Clean energy technology transfer coordination), strike “8104” and insert “8105”.

Page 9, in the table of contents, after the matter related to section 12202, insert the following:

Sec. 12203. Apprenticeships.

Page 41, beginning on line 10, strike “Tribal Colleges or Universities, and local offices of the National Institute of Food and Agriculture and” and insert “and Tribal Colleges or Universities and”.

Page 56, strike lines 15 through 18 and insert the following:

(c) CLERICAL AMENDMENTS.—The table of contents of the Energy Independence and Security Act of 2007 (42 U.S.C. prec. 17001) is amended—

(1) in the item relating to section 452, by striking “Energy-intensive industries program” and inserting “Future of industry program”; and

(2) by adding at the end of the items relating to subtitle D of title IV the following:

Page 78, after line 12, insert the following:

(a) FINDINGS.—Congress finds the following:

(1) The Federal Government is the largest energy user in the United States.

(2) Reducing energy and water use in Federal facilities—

(A) saves taxpayer dollars;

(B) reduces greenhouse gas emissions from the Federal sector;

and

(C) increases employee comfort and productivity.

(3) It is important for the Federal Government to—

(A) develop goals for energy and water use reduction in Federal facilities; and

(B) to the maximum extent practicable, take measures that are life cycle cost effective.

(b) SENSE OF CONGRESS.—It is the sense of Congress that Federal agencies should—

(1) for each of fiscal years 2020 through 2030, reduce average building energy intensity (as measured in British thermal units per gross square foot) at facilities of the agency by 2.5 percent each fiscal year, relative to the average building energy intensity of the facilities of the agency in fiscal year 2018; and

(2) for each of fiscal years 2020 through 2030, improve water use efficiency and management, including stormwater management, at facilities of the agency by reducing agency water consumption intensity

(A) by reducing the potable water consumption by 54 percent by fiscal year 2030, relative to the potable water consumption of the agency in fiscal year 2007, through reductions of 2 percent each fiscal year (as measured in gallons per gross square foot);

(B) by reducing the industrial, landscaping, and agricultural water consumption of the agency, as compared to a baseline of that consumption by the agency in fiscal year 2010, through reductions of 2 percent each fiscal year (as measured in gallons); and

(C) by installing appropriate infrastructure features on federally owned property to improve stormwater and wastewater management.

Page 78, line 13, strike “Section 543” and insert the following:

(c) ENERGY MANAGEMENT REQUIREMENTS.—Section 543

Beginning on page 93, strike line 17 and all that follows through page 94, line 2 and insert the following:

“(dd) the responsible sourcing of grown, harvested, or mined materials, including through certifications of responsible sourcing, such as certifications provided by the Forest Stewardship Council, the Sustainable Forestry Initiative, the American Tree Farm System, or the Programme for the Endorsement of Forest Certification; and”

Page 99, after line 13, insert the following:

**SEC. 1413. USE OF ENERGY AND WATER EFFICIENCY MEASURES IN FEDERAL BUILDINGS.**

(a) FINDINGS.—Congress finds the following:

(1) Performance contracting is a private financing tool with guaranteed energy savings and has been used by the Federal Government for nearly 30 years.

(2) Energy savings performance contracts and utility energy service contracts allow the Government to invest in infrastructure using private sector financing and expertise, with a guarantee of results.

(3) Use of performance contracting has saved the Government and taxpayers more than \$18,000,000,000.

(4) By law, performance contracts are guaranteed to provide savings to Federal agencies.

(5) On average, performance contracts achieve savings in excess of the contractual and statutory guarantee.

(6) In a fiscally constrained environment, performance contracting helps to address the Federal Government’s backlog of maintenance and supplement scarce operations and maintenance dollars.

(7) The House of Representatives, the Senate, and the Office of Management and Budget have all acted to recognize the value of performance contracts by providing distinct budgetary consideration of them; in the 115th Congress, the House of Representatives included section 5109 in H. Con. Res. 71 to enable the greater use of performance contracting and to recognize their full cost savings benefits.

(8) Federal agencies are not taking full advantage of the cost-effective energy efficiency measures that are available and documented.

(9) Using performance contracts to carry out such energy efficiency measures would benefit taxpayers, the economy, and the environment.

(b) REPORTS.—Section 548(b) of the National Energy Conservation Policy Act (42 U.S.C. 8258(b)) is amended—

(1) in paragraph (3), by striking “and” at the end;

(2) in paragraph (4), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(5)(A) the status of the energy savings performance contracts and utility energy service contracts of each agency, to the extent that the information is not duplicative of information provided to the Secretary under a separate authority;



“(B) the quantity and investment value of the contracts for the previous year;

“(C) the guaranteed energy savings, or for contracts without a guarantee, the estimated energy savings, for the previous year, as compared to the measured energy savings for the previous year;

“(D) a forecast of the estimated quantity and investment value of contracts anticipated in the following year for each agency; and

“(E)(i) a comparison of the information described in subparagraph (B) and the forecast described in subparagraph (D) in the report of the previous year; and

“(ii) if applicable, the reasons for any differences in the data compared under clause (i).”.

Page 130, after line 2, insert the following:

(c) APPLICATION OF WAGE RATE REQUIREMENTS TO PARTIAL SYSTEM AND STATE ADMINISTERED REBATES.—Section 12202 of this Act shall not apply to rebates under sections 1522 and 1523.

Page 145, after line 22, insert the following:

SEC. 1603. APPLICATION OF WAGE RATE REQUIREMENTS TO WEATHERIZATION ASSISTANCE PROGRAM.

With respect to the Weatherization Assistance Program, the requirements of section 12202 shall apply only to work performed on multifamily buildings.

Page 167, line 2, strike “and” and insert “or”.

Page 173, line 12, strike the comma.

Page 186, line 3, strike “Section 112(d)” and insert “Section 112”.

Page 186, beginning on line 4, strike “(16 U.S.C. 2622(d))” and insert “(16 U.S.C. 2622)”.

Page 186, line 23, strike “is amended by” and insert “by”.

Page 229, strike line 4.

Page 229, lines 5 and 8, redesignate paragraphs (21) and (22) as paragraphs (20) and (21), respectively.

Page 231, after line 21, insert the following:

(j) CONFORMING AMENDMENT.—The table of contents in section 1 of the Energy Independence and Security Act of 2007 is amended by striking the items relating to section 606 and 607.

Page 236, line 17, strike “program” and insert “activities”.

Page 237, line 16, after “the program”, insert “established under section 2502(a)”.

Page 237, line 19, strike “create” and insert “advance”.

Page 238, line 16, insert “and low-cost” before “manner”.

Page 239, line 2, insert “and” after the semicolon.

Page 239, line 4, strike “; and” and insert a period.

Page 239, strike lines 5 through 7.

Page 239, line 24, insert “disposal,” after “refurbishing,”.

Page 249, line 3, before the period, insert “and redesignating subparagraphs (C) through (E) as subparagraphs (A) through (C)”.

Page 249, lines 8 and 9, strike “technology validation and market transformation program” and insert “demonstration and validation projects”.

Page 249, lines 11 through 14, strike “shall conduct a wind energy technology demonstration, validation, and market transformation program under which the Secretary”.

Page 249, line 23, insert “or validation” after “demonstration”.

Page 250, line 15, strike “and demonstration” and insert “demonstration, and commercial application”.

Page 276, line 14, strike “Act”.

Page 276, strike lines 21 through 23.

Page 311, strike line 23 through page 312, line 14.

Page 312, strike line 21 through page 318, line 2.

Page 332, line 23, strike “this section” and insert “subsections (a) through (f)”.

Page 342, strike lines 12 through 17 and insert the following:

“(f) There are authorized to be appropriated to the Secretary to carry out this section \$50,000,000, to remain available until expended, for each of fiscal years 2021 through 2025.”

Page 358, after line 22, insert the following:

(a) REPEAL.—Section 2 of the Methane Hydrate Research and Development Act of 2000 (30 U.S.C. 2001) is repealed.

(b) DEVELOPMENT.—Section 4 of the Methane Hydrate Research and Development Act of 2000 (30 U.S.C. 2003) is amended by striking “and development” in each place it occurs.

Page 358, line 23, redesignate subsection (a) as subsection (c).

Page 359, line 4, through page 360, line 8, strike ““(1) ASSISTANCE AND COORDINATION.—” and all that follows through “from methane hydrate reservoirs” and insert the following:

“(1) ASSISTANCE AND COORDINATION.—In carrying out the program of methane hydrate research authorized by this section, the Secretary may award grants, or enter into contracts or cooperative agreements to—

“(A) conduct research to assess and mitigate the environmental impact of natural methane hydrate degassing;

“(B) conduct research to identify the environmental and health impacts of methane hydrate development;

“(C) assess and develop technologies to mitigate environmental impacts of natural methane hydrate degassing and to mitigate environmental impacts of the exploration and commercial development of methane hydrates, including through the avoidance of the use of seismic testing; or

“(D) expand education and training programs in methane hydrate research through fellowships or other means for graduate education and training.

“(2) ENVIRONMENTAL MONITORING AND RESEARCH.—

“(A) IN GENERAL.—The Secretary, Secretary of Commerce, and Secretary of the Interior shall conduct a long-term environmental monitoring and research program to study methane hydrates.

“(B) NOTICE AND COMMENT.—In developing a plan for long-term environmental monitoring and research under subparagraph (A), the Secretaries shall publish in the Federal Register a notice providing for an opportunity for the public to comment on such plan prior to conducting monitoring and research under such subparagraph.”

Page 360, after line 13, insert the following:

(d) RESPONSIBILITIES OF THE SECRETARY.—Section 4(e) of the Methane Hydrate Research and Development Act of 2000 (30 U.S.C. 2003(e)) is amended to read as follows:

“(e) RESPONSIBILITIES OF THE SECRETARY.—In carrying out subsection (b)(1), the Secretary shall—

“(1) facilitate and develop partnerships among government, industrial enterprises, and institutions of higher education to research methane hydrates;

“(2) ensure that the data and information developed through the program are accessible and widely disseminated as needed and appropriate;

“(3) promote cooperation among agencies that are developing technologies that may hold promise for methane hydrate research;

“(4) report annually to Congress on the results of actions taken to carry out this chapter; and

“(5) ensure, to the maximum extent practicable, greater participation by the Department of Energy in international cooperative efforts.”

Page 360, lines 14 and 18 redesignate subsections (b) and (c) as subsections (e) and (f), respectively.

Page 383, line 16, strike “State-approved”.

Page 383, line 17, insert “that are approved by the rate-setting entity and” after “programs”.

Page 386, line 19, strike “; and” and insert a semicolon.

Page 386, line 21, strike the period at the end and insert “; and”.

Page 386, after line 21, insert the following:

“(C) is in compliance with subsection (i)(2).”

Page 388, strike lines 4 through 11 and insert the following:

(b) ACCESS FOR SURVEYS.—Section 7 of the Natural Gas Act (15 U.S.C. 717f) is further amended by adding at the end the following:

“(i)(1) For purposes of subsection (h), the exercise of the right of eminent domain does not include accessing property for purposes of surveying prior to acquiring the property, except in accordance with paragraph (2).

“(2) If a holder of a certificate of public convenience and necessity is unable to agree with the owner of property on access to the property for purposes of surveying, the holder shall enter into the dispute resolution process of the Commission. If dispute resolution fails, or if the property owner refuses to participate in such process, the Commission may, upon a showing by the holder of documented repeated, good faith efforts to work with the property owner to agree on such access, issue an order declaring that, upon a court order, for purposes of the relevant certificate and with respect to the relevant property, the exercise of the right of eminent domain under subsection (h) includes accessing the property, in a limited, non-land-disturbing manner, for purposes of surveying prior to acquiring the property.”.

At the end of title IV, add the following subtitle:

## **Subtitle C—Defending Against Rosatom Exports**

### **SEC. 4301. EXTENSION AND EXPANSION OF LIMITATIONS ON IMPORTATION OF URANIUM FROM RUSSIAN FEDERATION.**

(a) IN GENERAL.—Section 3112A of the USEC Privatization Act (42 U.S.C. 2297h–10a) is amended—

(1) in subsection (a)—

(A) by redesignating paragraph (7) as paragraph (8); and

(B) by inserting after paragraph (6) the following:

“(7) SUSPENSION AGREEMENT.—The term ‘Suspension Agreement’ has the meaning given that term in section 3102(13).”;

(2) in subsection (b)—

(A) by striking “United States to support” and inserting the following: United States—

“(1) to support”;

(B) by striking the period at the end and inserting a semicolon; and

(C) by adding at the end the following:

“(2) to reduce reliance on uranium imports in order to protect essential national security interests of the United States;

“(3) to revive and strengthen the supply chain for nuclear fuel produced and used in the United States; and

“(4) to expand production of nuclear fuel in the United States.”; and

(3) in subsection (c)—

(A) in paragraph (2)—

(i) in subparagraph (A)—

(I) by striking “After” and inserting “Except as provided in subparagraph (B), after”;

(II) in clause (vi), by striking “; and” and inserting a semicolon;

(III) in clause (vii), by striking the period at the end and inserting a semicolon; and

(IV) by adding at the end the following:

- “(viii) in calendar year 2021, 596,682 kilograms;
- “(ix) in calendar year 2022, 489,617 kilograms;
- “(x) in calendar year 2023, 578,877 kilograms;
- “(xi) in calendar year 2024, 476,536 kilograms;
- “(xii) in calendar year 2025, 470,376 kilograms;
- “(xiii) in calendar year 2026, 464,183 kilograms;
- “(xiv) in calendar year 2027, 459,083 kilograms;
- “(xv) in calendar year 2028, 344,312 kilograms;
- “(xvi) in calendar year 2029, 340,114 kilograms;
- “(xvii) in calendar year 2030, 332,141 kilograms;
- “(xviii) in calendar year 2031, 328,862 kilograms;
- “(xix) in calendar year 2032, 322,255 kilograms;
- “(xx) in calendar year 2033, 317,536 kilograms;
- “(xxi) in calendar year 2034, 298,088 kilograms;
- “(xxii) in calendar year 2035, 294,511 kilograms;
- “(xxiii) in calendar year 2036, 286,066 kilograms;
- “(xxiv) in calendar year 2037, 281,272 kilograms;
- “(xxv) in calendar year 2038, 277,124 kilograms;
- “(xxvi) in calendar year 2039, 277,124 kilograms; and
- “(xxvii) in calendar year 2040, 267,685 kilograms.”;

(ii) by redesignating subparagraph (B) as subparagraph (C); and

(iii) by inserting after subparagraph (A) the following:

“(B) ADMINISTRATION.—

“(i) IN GENERAL.—The Secretary of Commerce shall administer the import limitations described in subparagraph (A) in accordance with the provisions of the Suspension Agreement, including—

“(I) the limitations on sales of enriched uranium product and separative work units plus conversion;

“(II) the requirements for natural uranium returned feed associated with sales of enrichment, or enrichment plus conversion from the Russian Federation; and

“(III) any other provisions of the Suspension Agreement.

“(ii) EFFECT OF TERMINATION OF SUSPENSION AGREEMENT.—Clause (i) shall remain in effect if the Suspension Agreement is terminated.”;

(B) in paragraph (3)—

(i) in subparagraph (A), by striking the semicolon and inserting “; or”;

(ii) in subparagraph (B), by striking “; or” and inserting a period; and

(iii) by striking subparagraph (C);

(C) in paragraph (5)—

(i) in subparagraph (A)—

(I) by striking “reference data” and all that follows through “2019” and inserting the following: “Lower Scenario data in the 2019 report of the World Nuclear Association entitled ‘The Nuclear Fuel Report: Global Scenarios for Demand and Supply Availability 2019–2040’. In each of calendar years 2023, 2029, and 2035”; and

(II) by striking “report or a subsequent report” and inserting “report”;

(ii) by redesignating subparagraphs (B) and (C) as subparagraphs (C) and (D), respectively;

(iii) by inserting after subparagraph (A) the following:

“(B) REPORT REQUIRED.—Not later than one year after the date of the enactment of the Clean Economy Jobs and Innovation

Act, and every 3 years thereafter, the Secretary shall submit to Congress a report that includes—

“(i) a recommendation on the use of all publicly available data to ensure accurate forecasting by scenario data to comport to actual demand for low-enriched uranium for nuclear reactors in the United States; and

“(ii) an identification of the steps to be taken to adjust the import limitations described in paragraph (2)(A) based on the most accurate scenario data.”; and

(iv) in subparagraph (D), as redesignated by clause (ii), by striking “subparagraph (B)” and inserting “subparagraph (C)”;

(D) in paragraph (9), by striking “2020” and inserting “2040”;

(E) in paragraph (12)(B), by inserting “or the Suspension Agreement” after “the Russian HEU Agreement”; and

(F) by striking “(2)(B)” each place it appears and inserting “(2)(C)”.

(b) **APPLICABILITY.**—The amendments made by subsection (a) apply with respect to uranium imported from the Russian Federation on or after January 1, 2021.

Beginning on page 493, line 18, in the text of the amendment made by section 5341, redesignate sections 1313 through 1320 as sections 1312 through 1319, respectively.

Page 508, line 17, strike “(a) In general.—”.

Page 511, line 2, strike “1314(b)” and insert “1313(b)”.

Page 514, strike lines 20 and 21.

Page 514, line 22, through page 517, line 20, redesignate paragraphs (1) through (4) as subsections (a) through (d), respectively.

Page 517, line 22, strike “1313 through 1320” and insert “1312 through 1318”.

Page 521, after line 10, insert the following:

(h) **CRITICAL INFRASTRUCTURE DEFINED.**—The term “critical infrastructure” means infrastructure that the Secretary determines to be vital to socioeconomic activities such that, if destroyed or damaged, such destruction or damage could cause substantial disruption to such socioeconomic activities.

Page 521, line 14, strike “1312” and insert “1311”.

Page 521, after line 15, redesignate the items relating to sections 1313 through 1320 in the table of contents so as to relate to sections 1312 through 1319, respectively.

Page 562, line 1, strike “is amended” and insert “is further amended”.

Page 571, strike lines 2 through 8 and insert the following:

(A) in paragraph (3)(A)(ii), by inserting “, components for such vehicles, and charging equipment for such vehicles” after “vehicles”; and

Page 589, line 1, strike “(ii)” and insert “(iii)”.

Page 593, line 5, strike “REGISTERED” and insert “LEGAL FOR OPERATION ON A STREET OR HIGHWAY”.

Page 593, line 12, strike “registered to be operated” and insert “legal for operation”.

Page 593, line 14, strike “2 years” and insert “18 months”.

Page 595, line 23, strike “(i)(1)(A)” and insert “(i)(1)”.

Beginning on page 598, line 15, strike “Technology Transfer Coordinator” each place it appears in title VIII and insert “Chief Commercialization Officer”.

Page 613, line 6, strike “areas and” and insert “areas;”.

Page 613, line 9, strike “; and” and insert a semicolon.

Page 615, line 3, after “Secretary”, insert “, acting through the Chief Commercialization Officer established in section 1001(a) of the Energy Policy Act of 2005 (42 U.S.C. 16391(a))”.

Page 618, line 15, strike “The Secretary” and insert “In accordance with section 8307(b) of this Act, the Secretary”.

Page 619, line 9, strike “8104” and insert “8105”.

Page 619, line 16, insert “8104,” after “8103,”.

Page 634, line 10, strike “(a)” and insert “(e)”.

Page 643, line 14, strike “program” and insert “activities”.

Page 643, line 19, strike “program” and insert “Office of Technology Transitions”.

Page 644, line 4, strike “this program” and insert “the Office of Technology Transitions”.

Page 648, lines 11 and 12, strike “redesignating subsections (f) and (g) as subsections (g) and (h)” and insert “redesignating subsections (e) and (f) as subsections (g) and (h)”.

Page 700, line 19, strike “and”.

Page 705, line 9, strike “and”.

At the end of title IX, add the following:

## **Subtitle E—Title XVII Loan Program Reform**

### **SEC. 9501.LOAN PROGRAM OFFICE TITLE XVII REFORM.**

(a) **TERMS AND CONDITIONS.**—Section 1702 of the Energy Policy Act of 2005 (42 U.S.C. 16512) is amended—

(1) by amending subsection (b) to read as follows:

“(b) **SPECIFIC APPROPRIATION OR CONTRIBUTION.**—

“(1) **IN GENERAL.**—Except as provided in paragraph (2), the cost of a guarantee shall be paid by the Secretary using an appropriation made for the cost of the guarantee, subject to the availability of such an appropriation.

“(2) **INSUFFICIENT APPROPRIATIONS.**—If sufficient appropriated funds to pay the cost of a guarantee are not available, then the guarantee shall not be made unless—

“(A) the Secretary has received from the borrower a payment in full for the cost of the guarantee and deposited the payment into the Treasury; or

“(B) a combination of one or more appropriations and one or more payments from the borrower under this subsection has been made that is sufficient to cover the cost of the guarantee.”;

(2) in subsection (h)—

(A) by amending paragraph (1) to read as follows:

“(1) **IN GENERAL.**—The Secretary shall charge, and collect on or after the date of the financial close of an obligation, a fee for a guarantee in an amount that the Secretary determines is sufficient to cover applicable administrative expenses (including any costs associated with third-party consultants engaged by the Secretary).”; and

(B) by adding at the following:

“(3) **REDUCTION IN FEE AMOUNT.**—Notwithstanding paragraph (1) and subject to the availability of appropriations, the Secretary may reduce the amount of a fee for a guarantee under this subsection.”; and

(3) by adding at the end the following:

“(l) **APPLICATION STATUS.**—

“(1) **REQUEST.**—If the Secretary does not make a final decision on an application for a guarantee under this title by the date that is 180 days after receipt of the application by the Secretary, the applicant may request, on or after that date and not more than once every 60 days thereafter until a final decision is made, that the Secretary provide to the applicant a response described in paragraph (2).

“(2) **RESPONSE.**—Not later than 10 days after receiving a request from an applicant under paragraph (1), the Secretary shall provide to the applicant a response that includes—

“(A) a description of the current status of review of the application;

“(B) a summary of any factors that are delaying a final decision on the application, a list of what items are required in order to reach a final decision, citations to authorities stating the reasons why such items are required, and a list of actions the applicant can take to expedite the process; and

“(C) an estimate of when a final decision on the application will be made.

“(m) OUTREACH.—In carrying out this title, the Secretary shall—

“(1) provide assistance with the completion of applications for a guarantee under this title;

“(2) conduct outreach, including through conferences and online programs, to disseminate information to potential applicants; and

“(3) conduct outreach to encourage participation of supporting finance institutions and private lenders in eligible projects.

“(n) COORDINATION.—In carrying out this title, to the extent consistent with applicable law, the Secretary shall collaborate, coordinate, and share information with relevant offices within the Department.

“(o) REPORT.—Not later than 2 years after the date of the enactment of this subsection and every 3 years thereafter, the Secretary shall submit to Congress a report on the status of projects receiving guarantees under this title, including—

“(1) a list of such projects, including the guarantee amount, construction status, and financing partners of each such project;

“(2) the status of each such project’s loan repayment, including interest paid and future repayment projections;

“(3) estimate of the greenhouse gas emissions avoided from each such project;

“(4) data regarding the number of direct and indirect jobs retained, restored, or created by such projects;

“(5) the number of new projects projected to receive a guarantee under this title during the next 2 years and the aggregate guarantee amount; and

“(6) any other metrics the Secretary finds appropriate.”.

(b) STATE LOAN ELIGIBILITY.—

(1) DEFINITIONS.—Section 1701 of the Energy Policy Act of 2005 (42 U.S.C. 16511) is amended by adding at the end the following:

“(6) INDIAN TRIBE, NATIVE CORPORATION, TRIBAL ENERGY DEVELOPMENT ORGANIZATION.—The terms ‘Indian tribe’, ‘Native Corporation’, and ‘tribal energy development organization’ have the meaning given such terms in section 2601 of the Energy Policy Act of 1992 (25 U.S.C. 3501).

“(7) STATE.—The term ‘State’ has the meaning given the term in section 202 of the Energy Conservation and Production Act (42 U.S.C. 6802).

“(8) STATE ENERGY FINANCING INSTITUTION.—

“(A) IN GENERAL.—The term ‘State energy financing institution’ means a quasi-independent entity or an entity within a State agency or financing authority established by a State that may

—

“(i) provide financing support or credit enhancements, including loan guarantees and loan loss reserves, for eligible projects; and

“(ii) create liquid markets for eligible projects, including warehousing and securitization, or take other steps to reduce financial barriers to the deployment of existing and new eligible projects.

“(B) INCLUSION.—The term ‘State energy financing institution’ includes an entity or organization established to achieve the purposes described in clauses (i) and (ii) of subparagraph (A) by

an Indian tribe, Native Corporation, or tribal energy development organization.”.

(2) **TERMS AND CONDITIONS.**—Section 1702 of the Energy Policy Act of 2005 (42 U.S.C. 16512) is further amended—

(A) in subsection (a), by inserting “, including projects receiving financial support or credit enhancements from a State energy financing institution,” after “for projects”;

(B) in subsection (d)(1), by inserting “, including a guarantee for a project receiving financial support or credit enhancements from a State energy financing institution,” after “No guarantee”; and

(C) by adding at the end the following:

“(p) **STATE ENERGY FINANCING INSTITUTIONS.**—

“(1) **PARTNERSHIPS AUTHORIZED.**—State energy financing institutions providing financial support or credit enhancements for eligible projects may enter into partnerships with private entities, Indian tribes, Native Corporations, and tribal energy development organizations.

“(2) **PROHIBITION ON USE OF APPROPRIATED FUNDS.**—Amounts appropriated to the Department before the date of enactment of this subsection shall not be available to be used for the cost of guarantees made to State energy financing institutions.”.

(c) **PROJECT ELIGIBILITY EXPANSION.**—

(1) **IN GENERAL.**—The Energy Policy Act of 2005 is amended by adding after section 1703 the following new section:

**SEC. 1703A. OTHER ELIGIBLE PROJECTS.**

“(a) **IN GENERAL.**—The Secretary may make guarantees under this section only for projects that—

“(1) avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and

“(2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued, including projects that employ—

“(A) a system of technologies that combine existing technologies in an innovative manner;

“(B) elements of commercial technologies in combination with new or significantly improved technologies; or

“(C) new and innovative technologies developed outside the energy sector that enable modernization of existing energy infrastructure and systems.

“(b) **CATEGORIES.**—Projects from the following categories shall be eligible for a guarantee under this section:

“(1) Advanced nuclear energy facilities, including manufacturing and deployment of nuclear supply components for advanced nuclear reactors.

“(2) Carbon capture, utilization, and sequestration practices and technologies, including—

“(A) agricultural and forestry practices that store and sequester carbon; and

“(B) synthetic technologies to remove carbon from the air and oceans.

“(3) Energy storage technologies for residential, industrial, transportation, and power generation applications.

“(4) Technologies and systems for reducing emissions of greenhouse gases with high global warming potential, including for reducing methane leakage from natural gas transmission and distribution infrastructure.

“(5) Application of technologies, including data analytics, artificial intelligence, and other software to improve the energy efficiency, operations, and management of energy infrastructure, including electric grid operations.



“(6) Energy-water use efficiency in water resources infrastructure and water-using technologies.

“(7) Technologies for improving the resilience or reliability of existing energy infrastructure, including technologies that incorporate energy storage and grid modernization initiatives or improve the cybersecurity of energy technologies.

“(8) Technologies or processes for reducing greenhouse gas emissions from industrial applications, including iron, steel, cement, and ammonia production, hydrogen production, and generation of high-temperature heat.

“(9) Categories of projects and projects described in section 1703.

“(c) REGIONAL VARIATION.—Notwithstanding subsection (a)(2), the Secretary may, to account for regional variation in deployment of technology, make guarantees under this section for up to 6 projects that employ the same or similar technology as another project, provided no more than 2 projects that use the same or a similar technology are located in the same region of the United States.

“(d) STATE ENERGY FINANCING INSTITUTIONS.—Notwithstanding subsection (a), the Secretary may use up to 25 percent of authority provided for commitments to guarantee loans under this title for projects—

“(1) that are receiving financial support or credit enhancements from a State energy financing institution; and

“(2) that meet the requirements of paragraph (1) of subsection (a), but do not meet the requirements of paragraph (2) of subsection (a).

“(e) EMISSION LEVELS AND TAX CREDITS.—Subsections (d) and (e) of section 1703 shall apply with respect to projects receiving guarantees under this section.”.

(2) APPLICABILITY.—Section 1702 of the Energy Policy Act of 2005 (42 U.S.C. 16512) is further amended by adding at the end the following:

“(q) APPLICABILITY.—The Secretary shall not, for a period of 10 years after the date of enactment of this subsection, enter into a loan guarantee agreement for an eligible project—

“(1) under section 1703A; or

“(2) that is receiving financial support or credit enhancements from a State energy financing institution.”.

(3) CONFORMING AMENDMENTS.—

(A) DEFINITION OF ELIGIBLE PROJECTS.—Section 1701(3) of the Energy Policy Act of 2005 (42 U.S.C. 16511(3)) is amended by inserting “or section 1703A” after “section 1703”.

(B) TABLE OF CONTENTS.—The table of contents for the Energy Policy Act of 2005 is amended by inserting after the item relating to section 1703 the following:

“Sec. 1703A. Other eligible projects.”.

#### **SEC. 9502. AUTHORIZATION OF APPROPRIATIONS.**

Section 1704 of the Energy Policy Act of 2005 (42 U.S.C. 16514) is amended by adding at the end the following:

“(c) ADMINISTRATIVE AND OTHER EXPENSES.—There are authorized to be appropriated—

“(1) \$32,000,000 for each of fiscal years 2021 through 2025 to carry out this title; and

“(2) for fiscal year 2021, in addition to amounts authorized under paragraph (1), \$25,000,000, to remain available until expended, for administrative expenses described in section 1702(h)(1) that are not covered by fees collected pursuant to section 1702(h).”.

Page 737, strike lines 23 through 25.

Page 750, line 3, strike “Education;” and insert “Education.”.

Page 750, line 5, strike “Policy;” and insert “Policy.”.

Page 750, line 7, strike “Health;” and insert “Health.”.

Page 750, line 9, strike “Service;” and insert “Service.”.

Page 750, line 11, strike “Affairs;” and insert “Affairs.”.

Page 750, line 13, strike “Council; and” and insert “Council.”.

Page 766, line 15, strike “Tribal governments.” and insert “Tribal Governments.”.

Page 766, line 20, strike “Energy and” and insert “Energy,”.

Page 766, line 21, strike “Agency” and insert “Agency, the Department of the Interior, and the National Oceanic and Atmospheric Administration”.

Page 767, line 10, strike “Energy” and insert “Energy,”.

Page 767, line 11, strike “and the Environmental Protection Agency” and insert “the Environmental Protection Agency, the Department of the Interior, and the National Oceanic and Atmospheric Administration”.

Page 768, line 1, strike “(3)” and insert “(2)”.

Page 773, line 12, strike “SEC. 11007. JUSTICE CLEARINGHOUSE.” and insert “SEC. 11007. ENVIRONMENTAL JUSTICE CLEARINGHOUSE.”.

Page 775, line 7, strike “clearinghouse” and insert “Clearinghouse”.

Page 779, line 21, strike “recommendations” and insert “recommendation”.

Page 780, line 23, strike “Indigenous” and insert “indigenous”.

Page 809, line 7, strike “a covered agency” and insert “an entity subject to this title (referred to in this title as a ‘covered entity’)”.

Page 809, line 11, strike “agency” and insert “entity”.

Page 809, line 20, strike “agency” and insert “entity”.

Page 810, line 1, strike “agency” and insert “entity”.

Page 810, line 4, strike “agency” and insert “entity”.

Page 810, line 5, strike “agency’s” and insert “entity’s”.

Page 811, line 25, strike “agency” and insert “entity”.

Page 812, line 12, strike “agency” and insert “entity”.

Add at the end of title XI the following:

**SEC. 11017. PUBLIC HEALTH RISKS ASSOCIATED WITH CUMULATIVE ENVIRONMENTAL STRESSORS.**

(a) **PROPOSED PROTOCOL.**—Not later than 180 days after the date of enactment of this section, the Administrator, in consultation with the Advisory Council, shall publish a proposal for a protocol for assessing and addressing the cumulative public health risks associated with multiple environmental stressors. The Administrator shall allow 90 days for public comment on such proposal. The environmental stressors addressed under such proposal shall include—

(1) impacts associated with global climate change, including extreme heat, extremes in temperature change, drought, wildfires, sea level rise, flooding, storms, water shortage, food shortage, ecosystem disruption, and the spread of infectious disease;

(2) exposure to pollutants, emissions, discharges, waste, chemicals, or other materials subject to regulation under the Clean Air Act, the Federal Water Pollution Control Act, the Safe Drinking Water Act, the Toxic Substances Control Act, the Solid Waste Disposal Act, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the Emergency Planning and Community Right-to-Know Act of 1986, and other laws administered by the Administrator; and

(3) other environmental stressors determined by the Administrator to impact public health.

(b) **FINAL PROTOCOL.**—Not later than 1 year after the enactment of this section, the Administrator shall publish the final protocol for assessing and addressing the cumulative public health risks associated with multiple environmental stressors.

(c) **IMPLEMENTATION.**—Not later than 3 years after the enactment of this section, the Administrator shall implement the protocol described under subsection (b).

Page 813, line 20, strike “establish and carry out” and insert “support the establishment and execution of”.

Page 814, strike line 10 and all that follows through page 830, line 5, and insert the following:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 12111.ENERGY WORKFORCE DEVELOPMENT.**

(a) **IN GENERAL.**—Subject to the availability of appropriations for such purpose, the Secretary of Labor and the Secretary of Energy, acting through the Director of the Office of Economic Impact, Diversity, and Employment, shall jointly establish and carry out a comprehensive, nationwide program to improve education and training for jobs in energy-related industries, including manufacturing, engineering, construction, and retrofitting jobs in such energy-related industries in order to the increase number of skilled workers trained to work in such energy-related industries, including by—

(1) encouraging underrepresented groups, including religious and ethnic minorities, women, veterans, individuals with disabilities, unemployed energy workers, and socioeconomically disadvantaged individuals to enter into the science, technology, engineering, and mathematics (in this section referred to as “STEM”) fields;

(2) encouraging the Nation’s educational institutions to equip students with the skills, mentorships, training, and technical expertise necessary to fill the employment opportunities vital to managing and operating the Nation’s energy-related industries;

(3) providing students and other candidates for employment with the necessary skills and certifications for skilled jobs in such energy-related industries; and

(4) strengthening and more fully engaging Department of Energy programs and laboratories in carrying out the Department’s Minorities in Energy Initiative.

(b) **DIRECT ASSISTANCE.**—

(1) **IN GENERAL.**—In carrying out the program established under subsection (a), the Secretaries may provide financial assistance awards, technical assistance, and other assistance the Secretaries determine appropriate, to educational institutions and training programs and providers, including those serving unemployed and underemployed energy workers.

(2) **DISTRIBUTION.**—The Secretaries shall distribute assistance described in paragraph (1) in a manner proportional to the needs of energy-related industries and demand for jobs in energy-related industries, consistent with information developed under subsection (e), and to the extent practicable, ensure a geographically diverse distribution, including a geographically diverse distribution among regions of the country and among urban, suburban, and rural areas.

(c) **PRIORITY.**—In carrying out the program established under subsection (a) the Secretaries shall prioritize the education and training of individuals from underrepresented populations for jobs in energy-related industries.

(d) **COLLABORATION AND OUTREACH.**—In carrying out the program established under subsection (a), the Secretaries shall—

(1) collaborate with—

(A) to the maximum extent possible, State or local workforce development boards and State workforce agencies, to maximize program efficiency;

(B) educational institutions and training programs and providers; and

(C) employers and labor organizations in energy-related industries providing opportunities to participate in internships, fellowships, traineeships, and apprenticeships to students, including students of minority-serving institutions and unemployed or underemployed energy workers, and other candidates, such as underrepresented populations; and

(2) conduct outreach activities to—

(A) encourage individuals from underrepresented populations and unemployed or underemployed energy workers to enter into the

STEM fields; and

(B) encourage and foster collaboration, mentorships, and partnerships among energy-related industries, and training programs and providers, that provide effective training programs for jobs in energy-related industries and educational institutions that seek to establish these types of programs in order to share best practices and approaches that best suit local, State, and national needs.

(e) CLEARINGHOUSE.—

(1) ESTABLISHMENT.—In carrying out the program established under subsection (a), the Secretary of Labor, in collaboration with Secretary of Energy, the Secretary of Education, the Secretary of Commerce, and the Director of the Bureau of the Census, and energy-related industries, shall establish a clearinghouse on a publicly accessible website to—

(A) develop, maintain, and update information and other resources, by State and by region, on—

(i) training programs for jobs in energy-related industries; and

(ii) the current and future workforce needs of energy-related industries, and job opportunities in such energy-related industries, including identification of jobs in energy-related industries for which there is the greatest demand; and

(B) act as a resource for educational institutions and training programs and providers that would like to develop and implement training programs for such jobs.

(2) REPORT.—The Secretaries shall annually publish a report on the information and other resources developed, maintained, and updated on the clearinghouse established under paragraph (1), including—

(A) a report providing comprehensive and detailed description of the workforce needs of such energy-related industries, and job opportunities in such energy-related industries, by State and by region; and

(B) publish an annual report on job creation in the energy-related industries described in subsection (f)(1).

(f) GUIDELINES TO DEVELOP SKILLS FOR AN ENERGY INDUSTRY WORKFORCE.—

(1) IN GENERAL.—In carrying out the program established under subsection (a), the Secretaries, in collaboration with the Secretary of Education, the Secretary of Commerce, and the National Science Foundation, shall develop voluntary guidelines or best practices for educational institutions to help provide students with the skills necessary for jobs in energy-related industries, including jobs in—

(A) the energy efficiency industry, including jobs in energy efficiency (including architecture, design, and construction of new energy efficient buildings), conservation, weatherization, retrofitting, inspecting, auditing, and software development;

(B) the renewable energy industry, including jobs in the development, engineering, manufacturing, and production of energy from renewable energy sources (such as solar, hydropower, wind, and geothermal energy);

(C) the community energy resiliency industry, including jobs in the installation of rooftop solar, in battery storage, and in microgrid technologies;

(D) the fuel cell and hydrogen energy industry;

(E) the advanced automotive technology industry, including jobs relating to electric vehicle batteries, connectivity and automation, and advanced combustion engines;

(F) the manufacturing industry, including jobs as operations technicians, in operations and design in additive manufacturing, 3–

D printing, and advanced composites and advanced aluminum and other metal alloys, and in industrial energy efficiency management systems, including power electronics, and other innovative technologies;

(G) the chemical manufacturing industry, including jobs in construction (such as welders, pipefitters, and tool and die makers), as instrument and electrical technicians, machinists, chemical process operators, engineers, quality and safety professionals, and reliability engineers;

(H) the utility industry, including jobs in smart grid technology, cybersecurity management, and the generation, transmission, and distribution of electricity and natural gas, such as electricians and utility dispatchers, technicians, operators, lineworkers, engineers, scientists, and information technology specialists;

(I) the alternative fuels industry, including jobs in biofuel and bioproducts development and production;

(J) the pipeline industry, including jobs in pipeline construction and maintenance and jobs as engineers and technical advisors;

(K) the nuclear energy industry, including jobs as scientists, engineers, technicians, mathematicians, and security personnel;

(L) the oil and gas industry, including jobs as scientists, engineers, technicians, mathematicians, petrochemical engineers, and geologists; and

(M) the coal industry, including jobs as coal miners, engineers, developers and manufacturers of state-of-the-art coal facilities, technology vendors, coal transportation workers and operators, and mining equipment vendors.

(2) ENERGY EFFICIENCY AND CONSERVATION INITIATIVES.

—The guidelines or best practices developed under paragraph (1) shall include grade-specific guidelines for elementary schools and secondary schools for teaching energy efficiency technology, architecture, design, and construction of new energy-efficient buildings and building energy retrofits, manufacturing efficiency technology, community energy resiliency, and conservation initiatives.

(3) STEM EDUCATION.—The guidelines or best practices developed under paragraph (1) shall promote STEM education and energy related programs of study in educational institutions as it relates to job opportunities in energy-related industries listed under such paragraph.

(g) OUTREACH TO MINORITY SERVING INSTITUTIONS.—In carrying out the program established under subsection (a), the Secretaries shall—

(1) give special consideration to increasing outreach to minority-serving institutions;

(2) make resources available to minority-serving institutions with the objective of increasing the number of skilled minorities and women trained for jobs in energy-related industries, including manufacturing, engineering, construction, and retrofitting jobs in such energy-related industries;

(3) encourage energy-related industries to improve the opportunities for students of minority-serving institutions to participate in industry internships, apprenticeships, and cooperative work-study programs; and

(4) partner with the Department of Energy laboratories to increase underrepresented groups' participation in internships, fellowships, traineeships, and employment at all Department of Energy laboratories.

(h) OUTREACH TO DISPLACED, UNEMPLOYED AND UNDEREMPLOYED ENERGYWORKERS.—In carrying out the program established under subsection (a), the Secretaries shall—

(1) give special consideration to increasing outreach to employers and job trainers preparing displaced, unemployed, and underemployed energy workers for emerging jobs in energy-related industries, including

manufacturing, engineering, construction, and retrofitting jobs in such energy-related industries;

(2) make resources available to institutions serving displaced and unemployed energy workers with the objective of increasing the number of individuals trained for jobs in energy-related industries, including manufacturing, engineering, construction, and retrofitting jobs in such energy-related industries; and

(3) encourage energy-related industries to improve opportunities for displaced and unemployed energy workers to participate in industry internships, apprenticeships, and work-study programs.

(i) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this section \$15,000,000 for each of fiscal years 2021 through 2025.

**SEC. 12112. ENERGY WORKFORCE GRANT PROGRAM.**

(a) **PROGRAM.**—

(1) **ESTABLISHMENT.**—Subject to the availability of appropriations for such purpose, the Secretary of Labor and the Secretary of Energy, acting through the Director of the Office of Economic Impact, Diversity, and Employment, shall jointly establish and carry out a program to provide grants to eligible entities to pay the eligible wages of, or eligible stipends for, individuals during the time period that such individuals are receiving training to work in the renewable energy sector, energy efficiency sector, or grid modernization sector.

(2) **GUIDELINES.**—Not later than 60 days after the date of enactment of this Act, the Secretaries, in consultation with stakeholders, contractors, and organizations that work to advance existing residential energy efficiency, shall establish guidelines to identify training that is eligible for purposes of the program established pursuant to paragraph (1).

(b) **ELIGIBILITY.**—

(1) **IN GENERAL.**—To be eligible to receive a grant under the program established under subsection (a), an eligible entity shall be directly involved with energy efficiency or renewable energy technology and provide services related to—

(A) renewable electric energy generation, including solar, wind, geothermal, hydropower, and other renewable electric energy generation technologies;

(B) energy efficiency, including energy-efficient lighting, heating, ventilation, and air conditioning, air source heat pumps, advanced building materials, insulation and air sealing, and other high-efficiency products and services, including auditing and inspection, architecture, design, and construction of new energy efficient buildings and building energy retrofits;

(C) grid modernization or energy storage, including smart grid, microgrid and other distributed energy solutions, demand response management, and home energy management technology; or

(D) fuel cell and hybrid fuel cell generation.

(2) **DEFINITIONS.**—In this subsection, the following terms apply:

(A) **ELIGIBLE ENTITY.**—The term “eligible entity” means—

(i) an employer in an industry described in paragraph (1);  
or

(ii) a labor organization, a joint-labor management organization, a State or local workforce board, or a training program or provider that provides training to individuals to work for an employer described in clause (i), or works on behalf of any such employers.

(B) **ELIGIBLE STIPEND.**—The term “eligible stipend” means a stipend that meets the criteria identified pursuant to the guidelines established under subsection (a)(2).

(C) **ELIGIBLE WAGES.**—The term “eligible wages” means wages that meet the criteria identified pursuant to the guidelines established under subsection (a)(2).

(c) **USE OF GRANTS.**—

(1) **ELIGIBLE WAGES.**—An eligible entity with—

(A) 20 or fewer employees may use a grant provided under the program established under subsection (a) to pay up to—

(i) 45 percent of an employee’s eligible wages for the duration of the applicable training for such employee, if the training is provided by the eligible entity; and

(ii) 90 percent of an employee’s eligible wages for the duration of the applicable training for such employee, if the training is provided by an entity other than the eligible entity;

(B) 21 to 99 employees may use a grant provided under the program established under subsection (a) to pay up to—

(i) 37.5 percent of an employee’s eligible wages for the duration of the applicable training for such employee, if the training is provided by the eligible entity; and

(ii) 75 percent of an employee’s eligible wages for the duration of the applicable training for such employee, if the training is provided by an entity other than the eligible entity; and

(C) 100 employees or more may use a grant provided under the program established under subsection (a) to pay up to—

(i) 25 percent of an employee’s eligible wages for the duration of the applicable training for such employee, if the training is provided by the eligible entity; and

(ii) 50 percent of an employee’s eligible wages for the duration of the applicable training for such employee, if the training is provided by an entity other than the eligible entity.

(2) **STIPEND.**—An eligible entity may use a grant provided under the program established under subsection (a) to pay up to 100 percent of an eligible stipend for an individual for the duration of the applicable training for such individual.

(d) **PRIORITY FOR TARGETED COMMUNITIES.**—In providing grants under the program established under subsection (a), the Secretary shall give priority to an eligible entity that—

(1) recruits or trains individuals who are—

(A) from the community that the eligible entity serves; and

(B)(i) from underrepresented populations; or

(ii) unemployed or underemployed energy workers; and

(2) will provide individuals receiving training with the opportunity to obtain or retain employment at an eligible entities.

(e) **LIMIT.**—An eligible entity may not receive more than \$100,000 under the program established under subsection (a) per fiscal year.

(f) **REPORT.**—The Secretaries shall submit to Congress, annually for each year the program established under subsection (a) is carried out, a report on such program, including—

(1) an assessment of such program for the previous year, including the number of jobs filled by individuals trained pursuant to such program; and

(2) recommendations on how to improve such program.

(g) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2021 through 2025.

#### **SEC. 12113. DEFINITIONS.**

In this part:

(1) **CAREER AND TECHNICAL EDUCATION.**—The term “career and technical education” has the meaning given such term in section 3 or the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302).

(2) **COMMUNITY-BASED ORGANIZATION.**—The term “community-based organization” has the meaning given such term in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

(3) **TRAINING PROGRAMS AND PROVIDERS.**—The term “training programs and providers” means State or local workforce development boards, community-based organizations, qualified youth or conservation corps, Job Corps authorized under subtitle C of title I the Workforce Innovation and Opportunity Act (29 U.S.C. 3101 et seq.), labor organizations, joint-labor management organizations, pre-apprenticeship programs, and apprenticeship programs.

(4) **EDUCATIONAL INSTITUTION.**—The term “educational institution” means an elementary school, secondary school, or institution of higher education, including educational institutions providing career and technical education programs and programs of study.

(5) **ELEMENTARY SCHOOL AND SECONDARY SCHOOL.**—The terms “elementary school” and “secondary school” have the meanings given such terms in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(6) **ENERGY-RELATED INDUSTRY.**—The term “energy-related industry” includes the energy efficiency industry, renewable energy industry, community energy resiliency industry, fuel cell and hydrogen energy industry, advanced automotive technology industry, chemical manufacturing industry, electric utility industry, gas utility industry, alternative fuels industry, pipeline industry, nuclear energy industry, oil and gas industry, and coal industry.

(7) **INSTITUTION OF HIGHER EDUCATION.**—The term “institution of higher education” has the meaning given such term in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002), except that such term does not include institutions described in subparagraph (A) or (C) of subsection (a)(1) of such section 102.

(8) **JOBS IN ENERGY-RELATED INDUSTRIES.**—The term “jobs in energy-related industries” includes manufacturing, engineering, construction, and retrofitting jobs in energy-related industries.

(9) **LABOR ORGANIZATION.**—The term “labor organization” has the meaning given such term in section 2 of the National Labor Relations Act (29 U.S.C. 152).

(10) **MINORITY-SERVING INSTITUTION.**—The term “minority-serving institution” means an institution of higher education that is of one of the following:

(A) A Hispanic-serving institution (as defined in section 502(a) of the Higher Education Act of 1965 (20 U.S.C. 1101a(a))).

(B) A Tribal College or University (as defined in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b))).

(C) An Alaska Native-serving institution (as defined in section 317(b) of the Higher Education Act of 1965 (20 U.S.C. 1059d(b))).

(D) A Native Hawaiian-serving institution (as defined in section 317(b) of the Higher Education Act of 1965 (20 U.S.C. 1059d(b))).

(E) A Predominantly Black Institution (as defined in section 318(b) of the Higher Education Act of 1965 (20 U.S.C. 1059e(b))).

(F) A Native American-serving nontribal institution (as defined in section 319(b) of the Higher Education Act of 1965 (20 U.S.C. 1059f(b))).

(G) An Asian American and Native American Pacific Islander-serving institution (as defined in section 320(b) of the Higher Education Act of 1965 (20 U.S.C. 1059g(b))).

(H) A historically Black college or university (having the meaning given the term “part B institution” in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061)).



(11) **QUALIFIED YOUTH OR CONSERVATION CORPS.**—The term “qualified youth or conservation corps” has the meaning given such term in section 203(11) of the Public Lands Corps Act of 1993 (16 U.S.C. 1722(11)).

(12) **SECRETARIES.**—The term “Secretaries” means the Secretary of Labor and the Secretary of Energy.

(13) **STATE OR LOCAL WORKFORCE DEVELOPMENT BOARD.**—The term “State or workforce development board” or “local workforce development board” have the meanings given the terms “State board” and “local board”, respectively, in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

(14) **STATE WORKFORCE AGENCY.**—The term “State workforce agency” means the State agency with responsibility for workforce investment activities under chapters 2 and 3 of subtitle B of title I of the Workforce Innovation and Opportunity Act (29 U.S.C. 3121 et seq., 3131 et seq.).

(15) **STEM.**—The term “STEM” means science, technology, engineering, and mathematics.

(16) **UNDERREPRESENTED POPULATIONS.**—The term “underrepresented populations” means a group of individuals (such as a group of individuals from the same gender or race), the members of which comprise fewer than 25 percent of the individuals employed in occupations in energy-related industries.

Page 832, after line 4, insert the following:

**SEC. 12203. APPRENTICESHIPS.**

(a) **IN GENERAL.**—Any funds made available under this Act to fund an apprenticeship or pre-apprenticeship program shall only be used for, or provided to, apprenticeship and pre-apprenticeship programs as defined this section, including any funds awarded for the purposes of grants, contracts, or cooperative agreements, or the development, implementation, or administration of a program funded in whole or part by federal funds under this Act.

(b) **APPRENTICESHIP DEFINED.**—In this Act, the term “apprenticeship” means an apprenticeship—

(1) registered under the Act of August 16, 1937 (commonly known as the “National Apprenticeship Act”; 50 Stat. 664, chapter 663; 29 U.S.C. 50 et seq.); and

(2) that complies with the requirements of subpart A of part 29 of title 29, Code of Federal Regulations, and part 30 of such title (as in effect on September 18, 2020).

(c) **PRE-APPRENTICESHIP DEFINED.**—In this Act, the term “pre-apprenticeship” or “pre-apprenticeship program” means a training model or program that—

(1) is designed to prepare participants to enter an apprenticeship program;

(2) is carried out by a sponsor that has a written agreement with 1 or more sponsors of apprenticeship programs; and

(3) includes each of the following:

(A) Training (including a curriculum for the training) aligned with industry standards related to an apprenticeship program and reviewed and approved annually by sponsors of the apprenticeship program that are parties to the written agreement, and that will prepare participants by teaching the skills and competencies needed to enter 1 or more apprenticeship programs.

(B) Hands-on training and theoretical education for participants that does not displace a paid employee.

(C) A formal agreement with a sponsor of an apprenticeship program that would enable participants who successfully complete the pre-apprenticeship program—

(i) to enter into the apprenticeship program if a place in the program is available and if the participant meets the

qualifications of the apprenticeship program; and

(ii) to earn credits towards the apprenticeship program.

Beginning on page 841, line 23, strike paragraph (1), and redesignate subsequent paragraphs accordingly.

Page 894, line 13, strike "Senate" and insert "House".

PART B—TEXT OF AMENDMENTS TO H.R. 4447 MADE IN ORDER

1. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE AXNE OF IOWA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 328, line 2, strike “industrial applications” and insert “industrial applications, including at biofuel facilities”.

2. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BARRAGÁN OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

At the end of title III, add the following:

## **Subtitle D—Climate Smart Ports**

### **SEC. 3401. CLIMATE SMART PORTS GRANT PROGRAM.**

(a) **ESTABLISHMENT.**—Not later than 6 months after the date of enactment of this section, the Administrator shall establish a program to award grants to eligible entities to purchase, and as applicable install, zero emissions port equipment and technology.

(b) **USE OF GRANTS.**—

(1) **IN GENERAL.**—An eligible entity may use a grant awarded under this section to purchase, and as applicable install, zero emissions port equipment and technology.

(2) **PROHIBITED USE.**—

(A) **IN GENERAL.**—An eligible entity may not use a grant awarded under this section to purchase or install fully automated cargo handling equipment or terminal infrastructure that is designed for fully automated cargo handling equipment.

(B) **HUMAN-OPERATED ZERO EMISSIONS PORT EQUIPMENT AND TECHNOLOGY.**—Nothing in subparagraph (A) prohibits an eligible entity from using a grant awarded under this section to purchase human-operated zero emissions port equipment and technology or infrastructure that supports such human-operated zero emissions port equipment and technology.

(3) **COST SHARE.**—

(A) **IN GENERAL.**—Except as provided in subparagraph (B), an eligible entity may not use a grant awarded under this section to cover more than 70 percent of the cost of purchasing, and as applicable installing, zero emissions port equipment and technology.

(B) **CERTAIN GRANTS.**—With respect to a grant in an amount equal to or greater than \$3,000,000, an eligible entity may use such grant to cover not more than 85 percent of the cost of purchasing and installing zero emissions port equipment and technology if such eligible entity certifies to the Administrator that—

(i) such grant will be used, at least in part, to employ laborers or mechanics to install zero emissions port equipment and technology; and

(ii) such eligible entity is a party to a project labor agreement or requires that each subgrantee of such eligible entity, and any subgrantee thereof at any tier, that performs such installation participate in a project labor agreement.

(4) **PROJECT LABOR.**—An eligible entity that uses a grant awarded under this section to install zero emissions port equipment and technology shall ensure, to the greatest extent practicable, that any subgrantee of such eligible entity, and any subgrantee thereof at any tier, that carries out such installation employs laborers or mechanics for such installation that—

(A) are domiciled not further than 50 miles from such installation;

(B) are members of the Armed Forces serving on active duty, separated from active duty, or retired from active duty;

(C) have been incarcerated or served time in a juvenile detention facility; or

(D) have a disability.

(c) WAGES.—

(1) IN GENERAL.—All laborers and mechanics employed by a subgrantee of an eligible entity, and any subgrantee thereof at any tier, to perform construction, alteration, installation, or repair work that is assisted, in whole or in part, by a grant awarded under this section shall be paid wages at rates not less than those prevailing on similar construction, alteration, installation, or repair work in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

(2) LABOR STANDARDS.—With respect to the labor standards in this subsection, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

(d) APPLICATION.—

(1) IN GENERAL.—To be eligible to be awarded a grant under this section, an eligible entity shall submit to the Administrator an application at such time, in such manner, and containing such information as the Administrator may require.

(2) PRIORITY.—The Administrator shall prioritize awarding grants under this section to eligible entities based on the following:

(A) The degree to which the proposed use of the grant will—

(i) reduce greenhouse gas emissions;

(ii) reduce emissions of any criteria pollutant and precursor thereof;

(iii) reduce hazardous air pollutant emissions; and

(iv) reduce public health disparities in communities that receive a disproportionate quantity of air pollution from a port.

(B) The amount of matching, non-Federal funds expected to be used by an applicant to purchase, and as applicable install, zero emissions port equipment and technology.

(C) Whether the applicant will use such grant to purchase, and as applicable install, zero emissions port equipment and technology that is produced in the United States.

(D) As applicable, whether the applicant will meet the utilization requirements for registered apprentices established by the Secretary of Labor or a State Apprenticeship Agency.

(E) As applicable, whether the applicant will recruit and retain skilled workers through a State-approved joint labor management apprenticeship program.

(e) OUTREACH.—

(1) IN GENERAL.—Not later than 90 days after funds are made available to carry out this section, the Administrator shall develop and carry out an educational outreach program to promote and explain the grant program established under subsection (a) to prospective grant recipients.

(2) PROGRAM COMPONENTS.—In carrying out the outreach program developed under paragraph (1), the Administrator shall—

(A) inform prospective grant recipients how to apply for a grant awarded under this section;

(B) describe to prospective grant recipients the benefits of available zero emissions port equipment and technology;

(C) explain to prospective grant recipients the benefits of participating in the grant program established under this section; and

(D) facilitate the sharing of best practices and lessons learned between grant recipients and prospective grant recipients with

respect to how to apply for and use grants awarded under this section.

(f) **REPORTS.**—

(1) **REPORT TO ADMINISTRATOR.**—Not later than 90 days after the date on which an eligible entity uses a grant awarded under this section, such eligible entity shall submit to the Administrator a report containing such information as the Administrator shall require.

(2) **ANNUAL REPORT TO CONGRESS.**—Not later than January 31, 2021, and annually thereafter, the Administrator shall submit to Congress and make available on the website of the Environmental Protection Agency a report that includes, with respect to each grant awarded under this section during the preceding calendar year—

(A) the name and location of the eligible entity that was awarded such grant;

(B) the amount of such grant that the eligible entity was awarded;

(C) the name and location of the port where the zero emissions port equipment and technology that was purchased, and as applicable installed, with such grant is used;

(D) an estimate of the impact of such zero emissions port equipment and technology on reducing—

(i) greenhouse gas emissions;

(ii) emissions of criteria pollutants and precursors thereof;

(iii) hazardous air pollutant emissions; and

(iv) public health disparities; and

(E) any other information the Administrator determines necessary to understand the impact of grants awarded under this section.

(g) **AUTHORIZATION OF APPROPRIATIONS.**—

(1) **IN GENERAL.**—There is authorized to be appropriated to carry out this section \$1,000,000,000 for each of fiscal years 2021 through 2030.

(2) **NONATTAINMENT AREAS.**—To the extent practicable, at least 25 percent of amounts made available to carry out this section in each fiscal year shall be used to award grants to eligible entities to provide zero emissions port equipment and technology to ports that are in nonattainment areas.

(h) **DEFINITIONS.**—In this section:

(1) **ACTIVE DUTY.**—The term “active duty” has the meaning given such term in section 101 of title 10, United States Code.

(2) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(3) **ALTERNATIVE EMISSIONS CONTROL TECHNOLOGY.**—The term “alternative emissions control technology” means a technology, technique, or measure that—

(A) captures the emissions of nitrogen oxide, particulate matter, reactive organic compounds, and greenhouse gases from the auxiliary engine and auxiliary boiler of an ocean-going vessel at berth;

(B) is verified or approved by a State or Federal air quality regulatory agency;

(C) the use of which achieves at least the equivalent reduction of emissions as the use of shore power for an ocean-going vessel at berth;

(D) the use of which results in reducing emissions of the auxiliary engine of an ocean-going vessel at berth to a rate of less than—

(i) 2.8 g/kW-hr for nitrogen oxide;

(ii) 0.03 g/kW-hr for particulate matter 2.5; and

(iii) 0.1 g/kW-hr for reactive organic compounds; and

(E) reduces the emissions of the auxiliary engine and boiler of an ocean-going vessel at berth by at least 80 percent of the default emissions rate, which is 13.8 g.

(4) **CRITERIA POLLUTANT.**—The term “criteria pollutant” means each of the following:

- (A) Ground-level ozone.
- (B) Particulate matter.
- (C) Carbon monoxide.
- (D) Lead.
- (E) Sulfur dioxide.
- (F) Nitrogen dioxide.

(5) **DISTRIBUTED ENERGY RESOURCE.**—

(A) **IN GENERAL.**—The term “distributed energy resource” means an energy resource that—

- (i) is located on or near a customer site;
- (ii) is operated on the customer side of the electric meter;

and

- (iii) is interconnected with the electric grid.

(B) **INCLUSIONS.**—The term “distributed energy resource” includes—

- (i) clean electric generation;
- (ii) customer electric efficiency measures;
- (iii) electric demand flexibility; and
- (iv) energy storage.

(6) **ELIGIBLE ENTITY.**—The term “eligible entity” means—

- (A) a port authority;
- (B) a State, regional, local, or Tribal agency that has jurisdiction over a port authority or a port;
- (C) an air pollution control district or air quality management district; or
- (D) a private or nonprofit entity, applying for a grant awarded under this section in collaboration with another entity described in subparagraphs (A) through (C), that owns or uses cargo or transportation equipment at a port.

(7) **ENERGY STORAGE SYSTEM.**—The term “energy storage system” means a system, equipment, facility, or technology that—

(A) is capable of absorbing energy, storing energy for a period of time, and dispatching the stored energy; and

(B) uses a mechanical, electrical, chemical, electrochemical, or thermal process to store energy that—

- (i) was generated at an earlier time for use at a later time;

or

- (ii) was generated from a mechanical process, and would otherwise be wasted, for delivery at a later time.

(8) **FULLY AUTOMATED CARGO HANDLING EQUIPMENT.**—The term “fully automated cargo handling equipment” means cargo handling equipment that—

(A) is remotely operated or remotely monitored; and

(B) with respect to the use of such equipment, does not require the exercise of human intervention or control.

(9) **NONATTAINMENT AREA.**—The term “nonattainment area” has the meaning given such term in section 171 of the Clean Air Act (42 U.S.C. 7501).

(10) **PORT.**—The term “port” includes a maritime port and an inland port.

(11) **PORT AUTHORITY.**—The term “port authority” means a governmental or quasi-governmental authority formed by a legislative body to operate a port.

(12) **PROJECT LABOR AGREEMENT.**—The term “project labor agreement” means a pre-hire collective bargaining agreement with one

or more labor organization that establishes the terms and conditions of employment for a specific construction project and is described in section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)).

(13) REGISTERED APPRENTICE.—The term “registered apprentice” means a person who is participating in a registered apprenticeship program.

(14) REGISTERED APPRENTICESHIP PROGRAM.—The term “registered apprenticeship program” means a program registered pursuant to the Act of August 16, 1937 (commonly known as the “National Apprenticeship Act”; 50 Stat. 664, chapter 663; 29 U.S.C. 50 et seq.).

(15) SHORE POWER.—The term “shore power” means the provision of shoreside electrical power to a ship at berth that has shut down main and auxiliary engines.

(16) STATE APPRENTICESHIP AGENCY.—The term “State Apprenticeship Agency” has the meaning given such term in section 29.2 of title 29, Code of Federal Regulations (as in effect on January 1, 2020).

(17) ZERO EMISSIONS PORT EQUIPMENT AND TECHNOLOGY.—

(A) IN GENERAL.—The term “zero emissions port equipment and technology” means equipment and technology, including the equipment and technology described in subparagraph (B), that—

- (i) is used at a port; and
- (ii) (I) produces zero exhaust emissions of—
  - (aa) any criteria pollutant and precursor thereof; and
  - (bb) any greenhouse gas, other than water vapor; or(II) captures 100 percent of the exhaust emissions produced by an ocean-going vessel at berth.

(B) EQUIPMENT AND TECHNOLOGY DESCRIBED.—The equipment and technology described in this subparagraph is the following:

- (i) Any equipment that handles cargo.
- (ii) A drayage truck that transports cargo.
- (iii) A train that transports cargo.
- (iv) Port harbor craft.
- (v) A distributed energy resource.
- (vi) An energy storage system.
- (vii) Electrical charging infrastructure.
- (viii) Shore power or an alternative emissions control technology.
- (ix) An electric transport refrigeration unit.



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3. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BARRAGÁN OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 784, line 22, strike "\$10,000,000" and insert "\$50,000,000".

4. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
BARRAGÁN OF CALIFORNIA OR HER DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 131, line 12, strike "\$310,000,000" and insert "\$410,000,000".

Page 131, line 13, strike "\$330,000,000" and insert "\$430,000,000".

Page 131, line 14, strike "\$350,000,000" and insert "\$450,000,000".

Page 131, line 15, strike "\$350,000,000" and insert "\$450,000,000".

Page 131, line 16, strike "\$350,000,000" and insert "\$450,000,000".

5. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BARRAGÁN OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 745, after line 15, insert the following:

(29) CLIMATE JUSTICE.—The term “climate justice” means the fair treatment and meaningful involvement of all individuals, regardless of race, color, culture, national origin, educational level, or income, with respect to the development, implementation, and enforcement of policies and projects that address climate change, a recognition of the historical responsibilities for climate change, and a commitment that the people and communities least responsible for climate change, and most vulnerable to the impacts of climate change, do not suffer disproportionately as a result of historical injustice and disinvestment.

(30) NATURAL INFRASTRUCTURE.—The term “natural infrastructure” means infrastructure that uses, restores, or emulates natural ecological processes and—

(A) is created through the action of natural physical, geological, biological, and chemical processes over time;

(B) is created by human design, engineering, and construction to emulate or act in concert with natural processes; or

(C) involves the use of plants, soils, and other natural features, including through the creation, restoration, or preservation of vegetated areas using materials appropriate to the region to manage stormwater and runoff, to attenuate flooding and storm surges, and for other related purposes.

Page 812, after line 17, insert the following:

**SEC. 11017. CLIMATE JUSTICE GRANT PROGRAM.**

(a) ESTABLISHMENT.—The Administrator shall establish a program under which the Administrator shall provide grants to eligible entities to assist the eligible entities in—

(1) building capacity to address issues relating to climate justice; and

(2) carrying out any activity described in subsection (d).

(b) ELIGIBILITY.—To be eligible to receive a grant under subsection (a), an eligible entity shall be a tribal government, local government, or nonprofit, community-based organization.

(c) APPLICATION.—To be eligible to receive a grant under subsection (a), an eligible entity shall submit to the Administrator an application at such time, in such manner, and containing such information as the Administrator may require, including—

(1) an outline describing the means by which the project proposed by the eligible entity will—

(A) with respect to climate justice issues at the local level, increase the understanding of the environmental justice community at which the eligible entity will conduct the project;

(B) improve the ability of the environmental justice community to address each issue described in subparagraph (A);

(C) facilitate collaboration and cooperation among various stakeholders (including members of the environmental justice community); and

(D) support the ability of the environmental justice community to proactively plan and implement climate justice initiatives,

(2) a proposed budget for each activity of the project that is the subject of the application;

(3) a list of proposed outcomes with respect to the proposed project;

(4) a description of the ways by which the eligible entity may leverage the funds of the eligible entity, or the funds made available through a grant under this subsection, to develop a project that is capable of being sustained beyond the period of the grant; and

(5) a description of the ways by which the eligible entity is linked to, and representative of, the environmental justice community at which the eligible entity will conduct the project.

(d) **USE OF FUNDS.**—An eligible entity may only use a grant under this subsection to carry out culturally and linguistically appropriate projects and activities that are driven by the needs, opportunities, and priorities of the environmental justice community at which the eligible entity proposes to conduct the project or activity to address climate justice concerns of the environmental justice community, including activities—

(1) to create or develop collaborative partnerships;

(2) to educate and provide outreach services to the environmental justice community on climate justice;

(3) to identify and implement projects to address climate justice concerns, including community solar and wind energy projects, energy efficiency, home and building electrification, home and building weatherization, energy storage, solar and wind energy supported microgrids, battery electric vehicles, electric vehicle charging infrastructure, natural infrastructure, and climate resilient infrastructure.

(e) **LIMITATIONS ON AMOUNT.**—The amount of a grant under this section may not exceed \$2,000,000 for any grant recipient.

(f) **REPORT.**—

(1) **IN GENERAL.**—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Administrator shall submit to the Committees on Energy and Commerce and Natural Resources of the House of Representatives and the Committees on Environment and Public Works and Energy and Natural Resources of the Senate a report describing the ways by which the grant program under this subsection has helped eligible entities address issues relating to energy and climate justice.

(2) **PUBLIC AVAILABILITY.**—The Administrator shall make each report required under paragraph (1) available to the public (including by posting a copy of the report on the website of the Environmental Protection Agency).

(g) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this subsection \$1,000,000,000 for each of fiscal years 2021 through 2025. The Administrator may not use more than 2 percent of the amount appropriated for each fiscal year for administrative expenses, including outreach and technical assistance to eligible entities.

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6. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BARRAGÁN OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 222, line 14, strike "\$200,000,000" and insert "\$250,000,000".

7. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BLUNT ROCHESTER OF DELAWARE OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Add at the end of title XII the following:

## **Subtitle G—Open Back Better**

### **SEC. 12701. FACILITIES ENERGY RESILIENCY.**

(a) DEFINITIONS.—In this section:

(1) COVERED PROJECT.—The term “covered project” means a building project at an eligible facility that—

(A) increases—

(i) resiliency, including—

(I) public health and safety;

(II) power outages;

(III) natural disasters;

(IV) indoor air quality; and

(V) any modifications necessitated by the COVID–19 pandemic;

(ii) energy efficiency;

(iii) renewable energy; and

(iv) grid integration; and

(B) may have combined heat and power and energy storage as project components.

(2) EARLY CHILDHOOD EDUCATION PROGRAM.—The term “early childhood education program” has the meaning given the term in section 103 of the Higher Education Act of 1965 (20 U.S.C. 1003).

(3) ELEMENTARY SCHOOL.—The term “elementary school” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(4) ELIGIBLE FACILITY.—The term “eligible facility” means a public facility, as determined by the Secretary, including—

(A) a public school, including an elementary school and a secondary school;

(B) a facility used to operate an early childhood education program;

(C) a local educational agency;

(D) a medical facility;

(E) a local or State government building;

(F) a community facility;

(G) a public safety facility;

(H) a day care center;

(I) an institution of higher education;

(J) a public library; and

(K) a wastewater treatment facility.

(5) ENVIRONMENTAL JUSTICE COMMUNITY.—The term “environmental justice community” means a community with significant representation of communities of color, low income communities, or Tribal and indigenous communities, that experiences, or is at risk of experiencing, higher or more adverse human health or environmental effects.

(6) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(7) LOCAL EDUCATIONAL AGENCY.—The term “local educational agency” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(8) LOW INCOME.—The term “low income”, with respect to a household, means an annual household income equal to, or less than, the greater of—

(A) 80 percent of the median income of the area in which the household is located, as reported by the Department of Housing and Urban Development; and

(B) 200 percent of the Federal poverty line.

(9) LOW INCOME COMMUNITY.—The term “low income community” means a census block group in which not less than 30 percent of households are low income.

(10) SECONDARY SCHOOL.—The term “secondary school” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(11) SECRETARY.—The term “Secretary” means the Secretary of Energy.

(12) STATE.—The term “State” has the meaning given the term in section 3 of the Energy Policy and Conservation Act (42 U.S.C. 6202).

(13) STATE ENERGY PROGRAM.—The term “State Energy Program” means the State Energy Program established under part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.).

(14) TRIBAL ORGANIZATION.—

(A) IN GENERAL.—The term “tribal organization” has the meaning given the term in section 3765 of title 38, United States Code.

(B) TECHNICAL AMENDMENT.—Section 3765(4) of title 38, United States Code, is amended by striking “section 4(l) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b(l))” and inserting “section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304)”.

(b) STATE PROGRAMS.—

(1) ESTABLISHMENT.—Not later than 60 days after the date of enactment of this Act, the Secretary shall distribute grants to States under the State Energy Program, in accordance with the allocation formula established under that Program, to implement covered projects.

(2) USE OF FUNDS.—

(A) IN GENERAL.—Subject to subparagraph (B), grant funds under paragraph (1) may be used for technical assistance, project facilitation, and administration.

(B) TECHNICAL ASSISTANCE.—A State may use not more than 10 percent of grant funds received under paragraph (1) to provide technical assistance for the development, facilitation, management, oversight, and measurement of results of covered projects implemented using those funds.

(C) ENVIRONMENTAL JUSTICE AND OTHER COMMUNITIES.—To support communities adversely impacted by the COVID–19 pandemic, a State shall use not less than 40 percent of grant funds received under paragraph (1) to implement covered projects in environmental justice communities or low income communities.

(D) PRIVATE FINANCING.—A State receiving a grant under paragraph (1) shall—

(i) to the extent practicable, leverage private financing for cost-effective energy efficiency, renewable energy, resiliency, and other smart-building improvements, such as by entering into an energy service performance contract; but

(ii) maintain the use of grant funds to carry out covered projects with more project resiliency, public health, and capital-intensive efficiency and emission reduction components than are typically available through private energy service performance contracts.

(E) GUIDANCE.—In carrying out a covered project using grant funds received under paragraph (1), a State shall, to the extent practicable, adhere to guidance developed by the Secretary pursuant to the American Recovery and Reinvestment Act of 2009 (Public Law 111–5; 123 Stat. 115) relating to distribution of funds, if that guidance will speed the distribution of funds under this subsection.

(3) NO MATCHING REQUIREMENT.—Notwithstanding any other provision of law, a State receiving a grant under paragraph (1) shall not be required to provide any amount of matching funding.

(4) REPORT.—Not later than 1 year after the date on which grants are distributed under paragraph (1), and each year thereafter until the funds appropriated under paragraph (5) are no longer available, the Secretary shall submit a report on the use of those funds (including in the communities described in paragraph (2)(C)) to—

(A) the Subcommittee on Energy and Water Development of the Committee on Appropriations of the Senate;

(B) the Subcommittee on Energy and Water Development and Related Agencies of the Committee on Appropriations of the House of Representatives;

(C) the Committee on Energy and Natural Resources of the Senate;

(D) the Committee on Energy and Commerce of the House of Representatives; and

(E) the Committee on Education and Labor of the House of Representatives.

(5) FUNDING.—In addition to any amounts made available to the Secretary to carry out the State Energy Program, there is authorized to be appropriated to the Secretary \$18,000,000,000 to carry out this subsection, to remain available until September 30, 2025.

(6) SUPPLEMENT, NOT SUPPLANT.—Funds made available under paragraph (5) shall supplement, not supplant, any other funds made available to States for the State Energy Program or the weatherization assistance program established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.).

(c) FEDERAL ENERGY MANAGEMENT PROGRAM.—

(1) IN GENERAL.—Not later than 60 days after the date of enactment of this Act, the Secretary shall use the funds appropriated under paragraph (4) to provide grants under the AFFECT program under the Federal Energy Management Program of the Department of Energy to implement covered projects.

(2) PRIVATE FINANCING.—A recipient of a grant under paragraph (1) shall—

(A) to the extent practicable, leverage private financing for cost-effective energy efficiency, renewable energy, resiliency, and other smart-building improvements, such as by entering into an energy service performance contract; but

(B) maintain the use of grant funds to carry out covered projects with more project resiliency, public health, and capital-intensive efficiency and emission reduction components than are typically available through private energy service performance contracts.

(3) REPORT.—Not later than 1 year after the date on which grants are distributed under paragraph (1), and each year thereafter until the funds appropriated under paragraph (4) are no longer available, the Secretary shall submit a report on the use of those funds to—



(A) the Subcommittee on Energy and Water Development of the Committee on Appropriations of the Senate;

(B) the Subcommittee on Energy and Water Development and Related Agencies of the Committee on Appropriations of the House of Representatives;

(C) the Committee on Energy and Natural Resources of the Senate;

(D) the Committee on Energy and Commerce of the House of Representatives; and

(E) the Committee on Education and Labor of the House of Representatives.

(4) FUNDING.—In addition to any amounts made available to the Secretary to carry out the AFFECT program described in paragraph (1), there is authorized to be appropriated to the Secretary \$500,000,000 to carry out this subsection, to remain available until September 30, 2025.

(d) TRIBAL ORGANIZATIONS.—

(1) IN GENERAL.—Not later than 60 days after the date of enactment of this Act, the Secretary, acting through the head of the Office of Indian Energy, shall distribute funds made available under paragraph (3) to tribal organizations to implement covered projects.

(2) REPORT.—Not later than 1 year after the date on which funds are distributed under paragraph (1), and each year thereafter until the funds made available under paragraph (3) are no longer available, the Secretary shall submit a report on the use of those funds to—

(A) the Subcommittee on Energy and Water Development of the Committee on Appropriations of the Senate;

(B) the Subcommittee on Energy and Water Development and Related Agencies of the Committee on Appropriations of the House of Representatives;

(C) the Committee on Energy and Natural Resources of the Senate;

(D) the Committee on Energy and Commerce of the House of Representatives; and

(E) the Committee on Education and Labor of the House of Representatives.

(3) FUNDING.—There is authorized to be appropriated to the Secretary \$1,500,000,000 to carry out this subsection, to remain available until September 30, 2025.

(e) USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS.

(1) IN GENERAL.—Except as provided in paragraph (2), none of the funds made available by or pursuant to this section may be used for a covered project unless all of the iron, steel, and manufactured goods used in the project are produced in the United States.

(2) EXCEPTIONS.—The requirement under paragraph (1) shall be waived by the head of the relevant Federal department or agency in any case or category of cases in which the head of the relevant Federal department or agency determines that—

(A) adhering to that requirement would be inconsistent with the public interest;

(B) the iron, steel, and manufactured goods needed for the project are not produced in the United States—

(i) in sufficient and reasonably available quantities; and

(ii) in a satisfactory quality; or

(C) the inclusion of iron, steel, and relevant manufactured goods produced in the United States would increase the overall cost of the project by more than 25 percent.

(3) WAIVER PUBLICATION.—If the head of a Federal department or agency makes a determination under paragraph (2) to waive the requirement under paragraph (1), the head of the Federal department or

agency shall publish in the Federal Register a detailed justification for the waiver.

(4) **INTERNATIONAL AGREEMENTS.**—This subsection shall be applied in a manner consistent with the obligations of the United States under all applicable international agreements.

(f) **WAGE RATE REQUIREMENTS.**—

(1) **IN GENERAL.**—Notwithstanding any other provision of law, all laborers and mechanics employed by contractors and subcontractors on projects funded directly or assisted in whole or in part by the Federal Government pursuant to this section shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”).

(2) **AUTHORITY.**—With respect to the labor standards specified in paragraph (1), the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

**SEC. 12702. PERSONNEL.**

(a) **IN GENERAL.**—To carry out section 12701, the Secretary of Energy shall hire within the Department of Energy—

(1) not less than 300 full-time employees in the Office of Energy Efficiency and Renewable Energy;

(2) not less than 100 full-time employees, to be distributed among—

(A) the Office of General Counsel;

(B) the Office of Procurement Policy;

(C) the Golden Field Office;

(D) the National Energy Technology Laboratory; and

(E) the Office of the Inspector General; and

(3) not less than 20 full-time employees in the Office of Indian Energy.

(b) **TIMELINE.**—Not later than 60 days after the date of enactment of this Act, the Secretary shall—

(1) hire all personnel under subsection (a); or

(2) certify that the Secretary is unable to hire all personnel by the date required under this subsection.

(c) **CONTRACT HIRES.**—

(1) **IN GENERAL.**—If the Secretary makes a certification under subsection (b)(2), the Secretary may hire on a contract basis not more than 50 percent of the personnel required to be hired under subsection (a).

(2) **DURATION.**—An individual hired on a contract basis under paragraph (1) shall have an employment term of not more than 1 year.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out this section \$84,000,000 for each of fiscal years 2021 through 2031.

(e) **REPORT.**—Not later than 60 days after the date of enactment of this Act, and annually thereafter for 2 years, the Secretary shall submit a report on progress made in carrying out subsection (a) to—

(1) the Subcommittee on Energy and Water Development of the Committee on Appropriations of the Senate;

(2) the Subcommittee on Energy and Water Development and Related Agencies of the Committee on Appropriations of the House of Representatives;

(3) the Committee on Energy and Natural Resources of the Senate;

(4) the Committee on Energy and Commerce of the House of Representatives; and

(5) the Committee on Education and Labor of the House of Representatives.



8. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BROWN OF MARYLAND OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 2, after the item relating to section 1602, insert the following:

Sec. 1603. Prohibition on category 1 respiratory sensitizers.

At the end of subtitle F of title I, insert the following:

**SEC. 1603. PROHIBITION ON CATEGORY 1 RESPIRATORY SENSITIZERS.**

Thermal insulating materials for building elements including walls, floors, ceilings, attics and roofs insulation, used for “Low Income Home Energy Assistance” and “Weatherization Assistance Program” shall not contain any substance that is a Category 1 respiratory sensitizer as defined in Appendix A to section 1910.1200 of title 29, Code of Federal Regulations, (specifically, Appendix A.4, “Respiratory or Skin Sensitization”), if such substance was intentionally added or is present at greater than 0.1 percent (1000 ppm) by weight in the product.

9. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
BURGESS OF TEXAS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Add at the end of subtitle F of title XII the following:

**SEC. 12607. EFFECTIVE DATE.**

This Act, and the amendments made by this Act, shall not take effect until the date on which the Secretary of Energy submits to Congress a certification that implementation of this Act, and the amendments made by this Act, will not reduce the energy security or energy independence of the United States.

10. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
BURGESS OF TEXAS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Add at the end of subtitle F of title XII the following:

**SEC. 12607. EFFECTIVE DATE.**

This Act, and the amendments made by this Act, shall not take effect until the date on which the Secretary of Energy submits to Congress a certification that implementation of this Act, and the amendments made by this Act, will not increase electric rates or gasoline prices outside of normal market factors.

11. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
BURGESS OF TEXAS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of subtitle F of title XII, add the following:

**SEC. 12\_\_\_\_. REPORT ON MINING OF CRITICAL MINERALS USING FORCED  
LABOR IN FOREIGN COUNTRIES.**

Not later than 180 days after the date of the enactment of this Act, the Secretary of the Interior, in consultation with the Commissioner of U.S. Customs and Border Protection and the Secretary of State, shall submit to the Congress a report evaluating the use of child labor, slavery, or human trafficking to mine or otherwise obtain one or more of the minerals listed in the Notice of the Department of the Interior entitled “Final List of Critical Minerals 2018” (83 Fed. Reg. 23295), or in any successor notice updating such Final List, for export to the United States.

12. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
BURGESS OF TEXAS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of subtitle F of title XII, insert the following:

**SEC. 12607. REPORT TO CONGRESS.**

The Secretary of Energy shall report to Congress on the effect of variable and distributed energy resources on the reliability of the electric grid, specifically pertaining to natural disasters and physical or cyber attacks on the grid infrastructure.



13. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
BURGESS OF TEXAS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Add after section 12606 the following:

**SEC. 12607. REPORT ON DUPLICATION OF EFFORTS AMONG APPLIED ENERGY  
PROGRAMS.**

Not later than 6 months after the date of the enactment of this Act, the Secretary of Energy shall report to Congress that includes the following:

(1) A description of potential duplication of research efforts among the applied energy programs of the Department of Energy.

(2) An evaluation of the opportunity costs associated with such duplication.

(3) Recommendations on how to streamline the research grant process.

(4) A description of the effects of combining projects that are duplicative with one another.

Page 9, after the matter relating to Section 12606, insert the following:

Sec. 12607. Report on duplication of efforts among applied energy programs.

14. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
CASTOR OF FLORIDA OR HER DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 9, after the item relating to section 12606, insert the following:

Sec. 12607. Study on equitable distribution of benefits of clean energy.

At the end of subtitle F of Title XII, insert the following:

**SEC. 12607. DEPARTMENT OF ENERGY RESEARCH MISSION ON CLIMATE  
CHANGE AND EMISSIONS REDUCTION.**

(a) **GOALS.**—Section 902 of the Energy Policy Act of 2005 (42 U.S.C. 16181) is amended—

(1) in paragraph (4), by striking “and” at the end; and

(2) by striking paragraph (5) and inserting the following:

“(5) decreasing the environmental impact of energy-related activities, including by deeply reducing emissions; and

“(6) improving energy-sector resilience to climate change.”.

(b) **EMISSIONS DEFINED FOR GOALS.**—Section 902 of the Energy Policy Act of 2005 (42 U.S.C. 16181) is amended by adding at the end the following:

“(e) **EMISSIONS DEFINED.**—In this section, the term ‘emissions’ means greenhouse gas emissions or other pollutants.”.

(c) **EMISSIONS REDUCTION.**—Section 911 of the Energy Policy Act of 2005 (42 U.S.C. 16191) is amended—

(1) in the heading by inserting “**AND EMISSIONS REDUCTIONS**” after “**ENERGY EFFICIENCY**”;

(2) in subsection (a)—

(A) in paragraph (1)—

(i) by inserting “and emissions reductions” after “energy efficiency”; and

(ii) in subparagraph (A), by inserting “, and reducing emissions from,” after “efficiency of”; and

(B) in paragraph (2)—

(i) by amending the matter preceding subparagraph (A)(i) to read as follows:

“(A) advanced, cost-effective technologies to improve the energy efficiency and environmental performance of, and reduce emissions from, vehicles, including—”;

(ii) by amending subparagraph (B) to read as follows:

“(B) cost-effective technologies for new construction and retrofit, to improve the energy efficiency and environmental performance of, and reduce emissions from buildings, using a whole-buildings approach, including onsite clean energy generation and beneficial electrification;”;

(iii) by amending subparagraph (C) to read as follows:

“(C) advanced technologies to improve the energy efficiency, environmental performance, and process efficiency of, and reduce emissions from industry, especially energy-intensive and waste-intensive industries;”;

(3) by adding at the end the following:

“(f) **EMISSIONS DEFINED.**—In this section, the term ‘emissions’ means greenhouse gas emissions or other pollutants.”.

15. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
CASTOR OF FLORIDA OR HER DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 9, after the item relating to section 12606, insert the following:

Sec. 12607. Study on equitable distribution of benefits of clean energy.

At the end of subtitle F of Title XII, insert the following:

**SEC. 12607. STUDY ON EQUITABLE DISTRIBUTION OF BENEFITS OF CLEAN ENERGY.**

(a) **FRONTLINE COMMUNITY.**—In this section, the term “frontline community” means a community with significant representation of communities of color, low-income communities, or Tribal and indigenous communities, that experiences, or is at risk of experiencing, higher or more adverse human health or environmental effects.

(b) **STUDY.**—Not later than 1 year after the date of the enactment of this Act, the Secretary of Energy shall enter into an agreement with the National Academies of Science, Engineering, and Medicine to undertake a study on technical and non-technical barriers to and solutions for ensuring equitable distribution of the benefits associated with clean energy in frontline communities across all sectors of the economy, and in particular the role of the Department of Energy in assessing and mitigating such barriers. The study shall—

(1) assess the state of research on the equitable distribution of the benefits of clean energy including workforce development and job creation;

(2) assess the progress in implementing programs and policies that result in increased adoption of clean energy technologies in frontline communities;

(3) identify barriers as well as potential incentives and mechanisms to achieving the equitable distribution of the benefits associated with clean energy in frontline communities, including through the consideration of social, behavioral, regulatory, policy, market, and technology aspects, and considerations of the characteristics of individual communities, such as geographical location, average income, and racial-ethnic composition; and

(4) recommend research areas for the Department of Energy to make progress towards ensuring equitable distribution of the benefits associated with clean energy in frontline communities.

16. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE CLARKE OF NEW YORK OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

At the end of title VI, add the following:

## **Subtitle G—Clean Refrigerated Vehicles Program**

### **SEC. 6701. PILOT PROGRAM FOR THE ELECTRIFICATION OF CERTAIN REFRIGERATED VEHICLES.**

(a) **ESTABLISHMENT OF PILOT PROGRAM.**—The Administrator shall establish and carry out a pilot program to award funds, in the form of grants, rebates, and low-cost revolving loans, as determined appropriate by the Administrator, on a competitive basis, to eligible entities to carry out projects described in subsection (b).

(b) **PROJECTS.**—An eligible entity receiving an award of funds under subsection (a) may use such funds only for one or more of the following projects:

(1) **TRANSPORT REFRIGERATION UNIT REPLACEMENT.**—A project to retrofit a heavy-duty vehicle by replacing or retrofitting the existing diesel-powered transport refrigeration unit in such vehicle with an electric transport refrigeration unit and retiring the replaced unit for scrappage.

(2) **SHORE POWER INFRASTRUCTURE.**—A project to purchase and install shore power infrastructure or other equipment that enables transport refrigeration units to connect to electric power and operate without using diesel fuel.

(c) **MAXIMUM AMOUNTS.**—The amount of an award of funds under subsection (a) shall not exceed—

(1) for the costs of a project described in subsection (b)(1), 75 percent of such costs; and

(2) for the costs of a project described in subsection (b)(2), 55 percent of such costs.

(d) **APPLICATIONS.**—To be eligible to receive an award of funds under subsection (a), an eligible entity shall submit to the Administrator—

(1) a description of the air quality in the area served by the eligible entity, including a description of how the air quality is affected by diesel emissions from heavy-duty vehicles;

(2) a description of the project proposed by the eligible entity, including—

(A) any technology to be used or funded by the eligible entity; and

(B) a description of the heavy-duty vehicle or vehicles of the eligible entity, that will be retrofitted, if any, including—

(i) the number of such vehicles;

(ii) the uses of such vehicles;

(iii) the locations where such vehicles dock for the purpose of loading or unloading; and

(iv) the routes driven by such vehicles, including the times at which such vehicles are driven;

(3) an estimate of the cost of the proposed project;

(4) a description of the age and expected lifetime control of the equipment used or funded by the eligible entity; and

(5) provisions for the monitoring and verification of the project including to verify scrappage of replaced units.

(e) PRIORITY.—In awarding funds under subsection (a), the Administrator shall give priority to proposed projects that, as determined by the Administrator—

- (1) maximize public health benefits;
- (2) are the most cost-effective; and
- (3) will serve the communities that are most polluted by diesel motor emissions, including communities that the Administrator identifies as being in either nonattainment or maintenance of the national ambient air quality standards for a criteria pollutant, particularly for—
  - (A) ozone; and
  - (B) particulate matter.

(f) DATA RELEASE.—Not later than 120 days after the date on which an award of funds is made under this section, the Administrator shall publish on the website of the Environmental Protection Agency, on a downloadable electronic database, information with respect to such award of funds, including—

- (1) the name and location of the recipient;
- (2) the total amount of funds awarded;
- (3) the intended use or uses of the awarded funds;
- (4) the date on which the award of funds was approved;
- (5) where applicable, an estimate of any air pollution or greenhouse gas emissions avoided as a result of the project funded by the award; and
- (6) any other data the Administrator determines to be necessary for an evaluation of the use and effect of awarded funds provided under this section.

(g) REPORTS TO CONGRESS.—

(1) ANNUAL REPORT TO CONGRESS.—Not later than 1 year after the date of the establishment of the pilot program under this section, and annually thereafter until amounts made available to carry out this section are expended, the Administrator shall submit to Congress and make available to the public a report that describes, with respect to the applicable year—

(A) the number of applications for awards of funds received under such program;

(B) all awards of funds made under such program, including a summary of the data described in subsection (f);

(C) the estimated reduction of annual emissions of air pollutants regulated under section 109 of the Clean Air Act (42 U.S.C. 7409), and the estimated reduction of greenhouse gas emissions, associated with the awards of funds made under such program;

(D) the number of awards of funds made under such program for projects in communities described in subsection (e)(3); and

(E) any other data the Administrator determines to be necessary to describe the implementation, outcomes, or effectiveness of such program.

(2) FINAL REPORT.—Not later than 1 year after amounts made available to carry out this section are expended, or 5 years after the pilot program is established, whichever comes first, the Administrator shall submit to Congress and make available to the public a report that describes—

(A) all of the information collected for the annual reports under paragraph (1);

(B) any benefits to the environment or human health that could result from the widespread application of electric transport refrigeration units for short-haul transportation and delivery of perishable goods or other goods requiring climate-controlled

conditions, including in low-income communities and communities of color;

(C) any challenges or benefits that recipients of awards of funds under such program reported with respect to the integration or use of electric transport refrigeration units and associated technologies;

(D) an assessment of the national market potential for electric transport refrigeration units;

(E) an assessment of challenges and opportunities for widespread deployment of electric transport refrigeration units, including in urban areas; and

(F) recommendations for how future Federal, State, and local programs can best support the adoption and widespread deployment of electric transport refrigeration units.

(h) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) DIESEL-POWERED TRANSPORT REFRIGERATION UNIT.—The term “diesel-powered transport refrigeration unit” means a transport refrigeration unit that is powered by an independent diesel internal combustion engine.

(3) ELECTRIC TRANSPORT REFRIGERATION UNIT.—The term “electric transport refrigeration unit” means a transport refrigeration unit in which the refrigeration or climate-control system is driven by an electric motor when connected to shore power infrastructure or other equipment that enables transport refrigeration units to connect to electric power, including all-electric transport refrigeration units, hybrid electric transport refrigeration units, and standby electric transport refrigeration units.

(4) ELIGIBLE ENTITY.—The term “eligible entity” means—

(A) a regional, State, local, or Tribal agency, or port authority, with jurisdiction over transportation or air quality;

(B) a nonprofit organization or institution that—

(i) represents or provides pollution reduction or educational services to persons or organizations that own or operate heavy-duty vehicles or fleets of heavy-duty vehicles; or

(ii) has, as its principal purpose, the promotion of air quality;

(C) an individual or entity that is the owner of record of a heavy-duty vehicle or a fleet of heavy-duty vehicles that operates for the transportation and delivery of perishable goods or other goods requiring climate-controlled conditions;

(D) an individual or entity that is the owner of record of a facility that operates as a warehouse or storage facility for perishable goods or other goods requiring climate-controlled conditions; or

(E) a hospital or public health institution that utilizes refrigeration for storage of perishable goods or other goods requiring climate-controlled conditions.

(5) HEAVY-DUTY VEHICLE.—The term “heavy-duty vehicle” means—

(A) a commercial truck or van—

(i) used for the primary purpose of transporting perishable goods or other goods requiring climate-controlled conditions; and

(ii) with a gross vehicle weight rating greater than 6,000 pounds; or

(B) an insulated cargo trailer used in transporting perishable goods or other goods requiring climate-controlled conditions when mounted on a semitrailer.

(6) SHORE POWER INFRASTRUCTURE.—The term “shore power infrastructure” means electrical infrastructure that provides power to the electric transport refrigeration unit of a heavy-duty vehicle when such vehicle is stationary on a property where such vehicle is parked or loaded, including a food distribution center or other location where heavy-duty vehicles congregate.

(7) TRANSPORT REFRIGERATION UNIT.—The term “transport refrigeration unit” means a climate-control system installed on a heavy-duty vehicle for the purpose of maintaining the quality of perishable goods or other goods requiring climate-controlled conditions.

(i) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There is authorized to be appropriated to carry out this section \$10,000,000, to remain available until expended.

(2) ADMINISTRATIVE EXPENSES.—The Administrator may use not more than 1 percent of amounts made available pursuant to paragraph (1) for administrative expenses to carry out this section.

17. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
CLEAVER OF MISSOURI OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of subtitle F of title XII, add the following:

**SEC. 12607.TREE PLANTING GRANT PROGRAM.**

(a) **DEFINITIONS.**—In this section:

(1) **ELIGIBLE COST.**—The term “eligible cost” means, with respect to a project—

(A) the cost of implementing the project, including—

- (i) planning and designing the planting activity;
- (ii) purchasing trees; and

(iii) preparing the site and conducting planting, including the labor and cost associated with the use of machinery;

(B) the cost of maintaining and monitoring planted trees for a period of up to 3 years to ensure successful establishment of the trees;

(C) the cost of training activities associated with the project; and

(D) any other relevant cost, as determined by the Secretary.

(2) **ELIGIBLE ENTITY.**—The term “eligible entity” means—

- (A) a State agency;
- (B) a local governmental entity;
- (C) an Indian Tribe;
- (D) a nonprofit organization; and
- (E) a retail power provider.

(3) **ENERGY BURDEN.**—The term “energy burden” means the percentage of household income spent on home energy bills.

(4) **INDIAN TRIBE.**—The term “Indian Tribe” has the meaning given the term “Indian tribe” in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(5) **LOCAL GOVERNMENTAL ENTITY.**—The term “local governmental entity” means any municipal government or county government with jurisdiction over local land use decisions.

(6) **NONPROFIT ORGANIZATION.**—The term “nonprofit organization” means an organization that—

(A) is described in section 170(h)(3) of the Internal Revenue Code of 1986; and

(B) operates in accordance with 1 or more of the purposes described in section 170(h)(4)(A) of that Code.

(7) **PROGRAM.**—The term “Program” means the grant program established under subsection (b)(1).

(8) **PROJECT.**—The term “project” means a tree planting project carried out by an eligible entity using grant funds awarded under the Program.

(9) **RETAIL POWER PROVIDER.**—The term “retail power provider” means any entity authorized under applicable State or Federal law to generate, distribute, or provide retail electricity, natural gas, or fuel oil service.

(10) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

(b) **ESTABLISHMENT.**—

(1) **IN GENERAL.**—The Secretary, in coordination with the Secretary of Agriculture, acting through the Chief of the Forest Service,



shall establish a program under which the Secretary shall award grants to eligible entities to conduct tree planting projects in accordance with this section.

(2) **TREE PLANTING.**—Subject to the availability of appropriations, in carrying out the Program, the Secretary shall, to the maximum extent practicable, award sufficient grants each year to plant not less than 300,000 trees each year.

(c) **APPLICATIONS.**—

(1) **IN GENERAL.**—An eligible entity that seeks to receive a grant under the Program shall submit an application to the Secretary at such time, in such form, and containing such information as the Secretary may require, including the information described in paragraph (2).

(2) **CONTENTS.**—An application submitted under paragraph (1) shall include—

(A) a description of how the project will reduce residential energy consumption;

(B) an estimate of the expected reduction in residential energy consumption;

(C) a description of the total eligible costs of the project and sources of funding for the project;

(D) a description of the anticipated community and stakeholder engagement in the project;

(E) a description of the tree species to be planted and how that species is suitable for the local environmental conditions and climate; and

(F) any other relevant information required by the Secretary.

(d) **PRIORITY.**—In awarding grants under the Program, the Secretary shall give priority to projects that—

(1) provide the largest potential reduction in residential energy consumption for households with a high energy burden;

(2) are located in a neighborhood with lower tree canopy cover and higher maximum daytime summer temperatures;

(3) are located in a neighborhood with high amounts of senior citizens or children;

(4) will collaboratively engage neighbors and community members that will be closely affected by the tree planting; and

(5) will employ a substantial percentage of the workforce locally, with a focus on engaging unemployed and underemployed persons.

(e) **COSTS.**—

(1) **FEDERAL SHARE.**—The Secretary shall award a grant to an eligible entity under the Program in an amount equal to not more than 75 percent of the eligible costs of the project, as determined by the Secretary.

(2) **MATCHING REQUIREMENT.**—As a condition of receiving a grant under the Program, an eligible entity shall provide, in cash or through in-kind contributions from non-Federal sources, matching funds in an amount equal to not less than 25 percent of the eligible costs of the project, as determined by the Secretary.

(f) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to carry out the Program \$50,000,000 for each of fiscal years 2021 through 2025.

18. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE COX OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 229, after line 7, insert the following (and redesignate paragraph (22) as paragraph (23)):

(22) Durable, low-cost solar-powered sensors, equipment, and machinery for off-grid use, with special consideration for agricultural applications, such as solar powered smart agricultural monitoring and irrigation systems

19. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
DEGETTE OF COLORADO OR HER DESIGNEE, DEBATABLE FOR  
10 MINUTES

Add at the end of title XI the following:

**SEC. 11017. ENVIRONMENTAL JUSTICE FOR COMMUNITIES OVERBURDENED BY ENVIRONMENTAL VIOLATIONS.**

(a) **IDENTIFICATION OF COMMUNITIES.**—Not later than 180 days after the date of enactment of this section, the Administrator shall, in consultation with the Advisory Council and co-regulators in State and local agencies, identify at least 100 communities—

(1) that are environmental justice communities; and

(2) in which there have been over the previous 5 years a number of violations of environmental law that the Administrator determines to be greater than the national average of such violations.

(b) **ANALYSIS AND RECOMMENDATIONS.**—Not later than 1 year after the enactment of this section, with respect to each community identified under subsection (a), and in consultation with the Advisory Council, the Administrator shall—

(1) undertake an analysis of the conditions which have led to the number of violations identified under subsection (a)(1), including through community-based science implemented through engagement with the residents of each such community;

(2) identify the root cause of the number of violations described under subsection (a)(1); and

(3) recommend measures that the Administrator shall take, in coordination with co-regulators in State and local agencies, to reduce the number of violations of environmental law to a number that the Administrator determines to be significantly below the national average.

(c) **IMPLEMENTATION.**—Not later than 2 years after the date of enactment of this section, the Administrator shall complete the implementation of the measures identified under subsection (b)(3).

20. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE DELGADO OF NEW YORK OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

At the end of part 2 of subtitle A of title XII, add the following:

(h) MONITORING.—The Secretary of Labor, in consultation with the Secretary of Energy, shall collect data to monitor current and future trends and shortages within the clean energy technology industry, which includes skilled technical personnel, electric power engineers, transmission engineers, and other occupations or fields of work under—

- (1) the agriculture and forestry industry;
- (2) the electric utility industry;
- (3) the manufacturing industry;
- (4) the wholesale trade industry;
- (5) the professional and business services industry; and
- (6) the manufacturing and operation and maintenance industries for component parts of clean energy technologies.

(i) REPORT ON CURRENT TRENDS AND SHORTAGES.—Not later than 120 days after the date of enactment of this Act, and on a quarterly basis thereafter, the Secretary shall submit to Congress, based on the data collected under subsection (h), a report on—

- (1) trends and shortages as of the date of such report, and recommendations to prepare the workforce to address such trends and shortages to meet the demands of a clean energy economy; and
- (2) other recommendations the Secretary determines appropriate.

(j) REPORT ON FUTURE TRENDS AND SHORTAGES.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress, based on the data collected under subsection (h), a report on—

- (1) trends and shortages projected in the next 10 years, and recommendations to address such trends and shortages to prepare the workforce to meet the demands of a clean energy economy; and
- (2) other recommendations the Secretary determines appropriate.

21. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
DESAULNIER OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 830, after line 5, insert the following:

**SEC. 12114. RENEWABLE ENERGY TRANSITION GRANT PROGRAM.**

(a) **IN GENERAL.**—The Secretary of Energy, in coordination with the Secretary of Labor, shall establish a grant program for local governments for the purpose of developing a plan to transition workers from employment in fossil fuel industries to employment in sustainable industries.

(b) **ELIGIBILITY.**—The Secretary of Energy may award grants under subsection (a) to local governments—

(1) that establish industry or sector partnerships (as defined in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102));

(2) that are in localities that the Secretary of Energy determines to have a percentage of traditional energy sector jobs that is average or above average relative to the United States.

(c) **DETERMINATION OF PERCENTAGE OF TRADITIONAL ENERGY SECTOR JOBS.**—In making the determination under subsection (b)(2), the Secretary of Energy shall take into consideration information from the report entitled “U.S. Energy and Employment Report” issued by the Secretary in January, 2017.

(d) **USE OF FUNDS.**—Funds under subsection (a) may be used for the following purposes:

(1) To develop a transition plan described in subsection (a).

(2) To develop an apprenticeship program to train individuals employed in fossil fuel industries and individuals who are new to the workforce for jobs in sustainable industries.

(e) **TRANSITION PLAN REQUIREMENTS.**—A transition plan funded under subsection (a) shall include a plan for unemployment insurance, job transition training, and community services for the communities affected by the transition.

(f) **AUTHORIZATION.**—There are authorized to be appropriated such sums as necessary to carry out this section.

On page 9, after the matter relating to section 12113, insert the following:

Sec. 12114. Renewable energy transition grant program

22. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
DINGELL OF MICHIGAN OR HER DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of subtitle H of title I, add the following:

**SEC. 1806.WATER HEATERS.**

(a) **DEFINITION OF WATER HEATER.**—Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended by striking paragraph (27) and inserting the following:

“(27) **WATER HEATER.**—

“(A) **IN GENERAL.**—The term ‘water heater’ means a product that utilizes oil, gas, or electricity to heat potable water for use outside the heater on demand, including—

“(i) storage type units that heat and store water at a thermostatically controlled temperature, including—

“(I) gas storage water heaters with an input of 75,000 Btu per hour or less, including heat pump type units that meet the current and voltage limits under clause (iii);

“(II) oil storage water heaters with an input of 105,000 Btu per hour or less; and

“(III) electric storage water heaters with an input of 12 kilowatts or less, including heat pump type units that meet the current and voltage limits under clause (iii);

“(ii)(I) instantaneous type units that heat water but contain not more than 1 gallon of water per 4,000 Btu per hour of input; and

“(II) in the case of—

“(aa) gas instantaneous water heaters, have an input of 200,000 Btu per hour or less and are designed and marketed to provide outlet hot water at a thermostatically controlled temperature of less than 180 degrees Fahrenheit;

“(bb) oil instantaneous water heaters, have an input of 210,000 Btu per hour or less; and

“(cc) electric instantaneous water heaters, have an input of 12 kilowatts or less;

“(iii) heat pump type units (including add-on heat pumps, integrated heat pumps with storage, split-system heat pumps that consist of a separate heat pump and storage tank that are designed and marketed to operate together, and all ancillary equipment, such as fans, storage tanks, pumps, electric resistance heating elements, or controls necessary for the device to perform its function) that—

“(I) have a maximum current rating of 24 amperes at a voltage not greater than 250 volts; and

“(II) are designed to transfer thermal energy from 1 temperature level to a different temperature level for the purpose of heating water;

“(iv) solar thermal-assisted electric storage units; and

“(v) solar thermal-assisted fossil fuel storage units.

“(B) **EXCLUSIONS.**—Unless otherwise determined by the Secretary under section 325(e)(7)(B), the term ‘water heater’ does not include—

“(i) electric storage type units described in subparagraph (A)(i)(III) that—

“(I) are designed and marketed exclusively for commercial building applications; and

“(II)(aa) are designed, constructed, inspected, tested, and stamped in accordance with Section IV, Part HLW, or Section X of the Boiler and Pressure Vessel Code promulgated by the American Society of Mechanical Engineers;

“(bb) exclusively use 3-phase electricity, are designed and marketed to provide outlet hot water at a thermostatically controlled temperature of 180 degrees Fahrenheit or greater, and operate only at rated voltages of not less than 208 volts; or

“(cc) exclusively use single-phase electricity, are designed and marketed to provide outlet hot water at a thermostatically controlled temperature of 180 degrees Fahrenheit or greater, and operate only at a rated voltage of 277 volts; or

“(ii) gas storage type units described in subparagraph (A)(i)(I) that—

“(I) are designed and marketed exclusively for commercial building applications; and

“(II) are designed, constructed, inspected, tested, and stamped in accordance with Section IV, Part HLW, of the Boiler and Pressure Vessel Code promulgated by the American Society of Mechanical Engineers.

“(C) MULTI-INPUT ELECTRIC STORAGE WATER HEATER.

—The term ‘multi-input electric storage water heater’ means a product that—

“(i) is not a heat pump type unit described in subparagraph (A)(iii); and

“(ii) is designed, marketed, or shipped from the manufacturer with a capability of operating or being configured to operate at inputs greater than, equal to, or below 12 kilowatts.

“(D) SOLAR THERMAL-ASSISTED ELECTRIC STORAGE UNIT.—The term ‘solar thermal-assisted electric storage unit’ means a unit that—

“(i) has an input of 12 kilowatts or less;

“(ii) has at least 2 dedicated ports in addition to the ports used for introduction and delivery of potable water for the supply and return of water or a heat transfer fluid heated externally by solar panels;

“(iii) does not have electric resistance heating elements located in the lower half of the storage tank;

“(iv) has the temperature sensing device that controls the auxiliary electric heat source located in the upper half of the storage tank; and

“(v) has a ratio of less than 0.70 for the proportion that the certified first hour rating bears to the nominal volume of the storage tank.”.

(b) STANDARDS FOR WATER HEATERS.—Section 325(e) of the Energy Policy and Conservation Act (42 U.S.C. 6295(e)) is amended by adding at the end the following:

“(7) EXEMPTED WATER HEATERS.—

“(A) DEFINITION OF EXEMPTED WATER HEATER.—In this paragraph, the term ‘exempted water heater’ means a water heater described in section 321(27)(B).

“(B) MONITORING OF SHIPMENTS.—

“(i) SUBMISSION OF DATA.—Not later than 90 days after the date of enactment of this paragraph, and not later than May 1 of each year thereafter, the Secretary shall require each manufacturer of water heaters to report to the Secretary the quantity of exempted water heaters, in each category of exempted water heaters, that the manufacturer shipped in the preceding calendar year.

“(ii) CONFIDENTIALITY REQUIREMENTS.—The Secretary shall treat shipment data reported by manufacturers under clause (i) as confidential business information subject to appropriate confidential data safeguards.

“(iii) PUBLICATION.—

“(I) BASELINE SHIPMENT DATA.—Not later than 120 days after the date of enactment of this paragraph, the Secretary shall publish an analysis of the data collected under clause (i) for public comment, subject to applicable confidentiality safeguards, which shall serve as the baseline data for the analysis described in subclause (II) (bb).

“(II) PERCENTAGE GROWTH FROM BASELINE.—Not later than June 1 of each year after the year in which the Secretary publishes data under subclause (I), the Secretary shall publish—

“(aa) an analysis of the data collected under clause (i) for public comment, subject to applicable confidentiality safeguards;

“(bb) the percentage growth in the number of shipments within each category of exempted water heater relative to the baseline data described in subclause (I); and

“(cc) the determination of the Secretary as to whether the number of shipments for any category of exempted water heater have increased by more than 25 percent compared to the baseline data for that category.

“(C) INCLUSION OF EXEMPTED WATER HEATERS.—

“(i) IN GENERAL.—The Secretary shall, by regulation, revise the definition of water heater under section 321(27) to include an exempted water heater under subparagraph (A) of that section if the Secretary makes an affirmative determination under subparagraph (B)(iii)(II)(cc) for that category of exempted water heater.

“(ii) ENERGY CONSERVATION STANDARDS.—Any category of exempted water heater included in the definition of water heater under clause (i) shall be required to meet the energy conservation standards applicable to an electric or gas storage type water heater under this part.

“(iii) EFFECTIVE DATE.—For any category of exempted water heater, the Secretary shall carry out clause (i), and require compliance under clause (ii), not later than 1 year after the date on which the Secretary makes the affirmative determination described in clause (i) for that category.

“(8) STANDARDS FOR MULTI-INPUT ELECTRIC STORAGE WATER HEATERS.—A multi-input electric storage water heater shall be subject to the test procedures, energy conservation standards, labeling (if applicable), and certification requirements—

“(A) for electric storage water heaters under this part; and

“(B) for storage water heaters under part C.

“(9) TECHNOLOGY-NEUTRAL ELECTRIC STORAGE WATER HEATER STANDARDS.—Notwithstanding any other provision of this



Act, the Secretary may not create separate product classes for heat pump water heaters and other electric storage water heaters.”.

(c) DEFINITION OF COMMERCIAL WATER HEATER.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by striking paragraph (12) and inserting the following:

“(12)(A) STORAGE WATER HEATER.—

“(i) IN GENERAL.—The term ‘storage water heater’ means a water heater that—

“(I) heats and stores water within an appliance at a thermostatically controlled temperature for delivery on demand; and

“(II) is not a water heater described in section 321(27)(A).

“(ii) EXCLUSION.—The term ‘storage water heater’ does not include a unit with an input rating of 4,000 Btu per hour or more per gallon of stored water.

“(B) INSTANTANEOUS WATER HEATER.—The term ‘instantaneous water heater’ means a water heater that—

“(i) has an input rating of at least 4,000 Btu per hour per gallon of stored water; and

“(ii) is not a water heater described in section 321(27)(A).

“(C) UNFIRED HOT WATER STORAGE TANK.—The term ‘unfired hot water storage tank’ means a tank used to store water that is heated externally.”.

(d) LABELING REQUIREMENTS.—Section 344 of the Energy Policy and Conservation Act (42 U.S.C. 6315) is amended by adding at the end the following:

“(l) LABELS FOR CERTAIN COMMERCIAL WATER HEATERS.—

“(1) IN GENERAL.—Notwithstanding any other provision of this section, water heaters described in section 321(27)(B) shall be required to bear a permanent label, applied at the point of manufacture, that, subject to paragraph (3), satisfies the requirements described in paragraph (2).

“(2) REQUIREMENTS.—A label required under paragraph (1) shall

—

“(A) be made of material not adversely affected by water;

“(B) be attached by means of nonwater-soluble adhesive; and

“(C) bear the following notice printed in 16.5 point Arial Narrow Bold font: ‘IMPORTANT INFORMATION: Exclusively intended for commercial installations. This model is not certified by the U.S. Department of Energy as a residential water heater. This model does not have a certified First Hour or UEF rating.’.

“(3) REVISION UPON PETITION.—On receipt of a petition by an interested party, the Secretary may conduct a rulemaking to revise the scope and requirements of the label required under paragraph (1).”.

(e) EFFECTIVE DATE.—This section and the amendments made by this section shall take effect 180 days after the date of enactment of this Act.

23. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
DOGGETT OF TEXAS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 383, after line 7, insert the following:

SEC. 3115. NATIONAL ACADEMY OF SCIENCES STUDY ON CARBON CAPTURE  
TECHNOLOGY.

(a) IN GENERAL.—The Secretary of Energy shall enter into an agreement with the National Academy of Sciences, Engineering, and Medicine to conduct a study evaluating the efficacy of carbon capture and storage technology by industry in reducing emissions and the cost-effectiveness of such technologies. Such study shall include a description of the following:

(1) Analysis of the effectiveness of emissions reductions and cost through implementation of carbon capture as compared to transitioning to other low-emissions technologies.

(2) Differences in performance of various carbon capture technologies and storage methods, including the net amount of carbon dioxide that can be permanently sequestered, the cost (in terms of dollar per ton captured/sequestered) of each technology, and the potential to increase the net amount of carbon dioxide captured/sequestered and lower operational costs.

(3) Barriers, in terms of cost, infrastructure, geology, aquifers, and markets, to ensuring permanent carbon storage including both point of source capture and removal from the atmosphere of captured carbon dioxide.

(4) Analysis of the lifecycle emissions associated with carbon capture technologies, including construction and operation of the carbon capture technology, as well as transport, processing, and injection of carbon dioxide, including the permanence of carbon storage and sequestration, and strategies to reduce those emissions. This should include the amount of carbon dioxide emitted from a facility outfitted with carbon capture technologies that is permanently sequestered compared to the amount of carbon dioxide emitted by the carbon capture process itself.

(5) Evaluation of the impact of carbon capture technologies on air pollution, including particulate emissions and ozone precursors, with specific analysis on the impacts on communities historically overburdened with pollution, including rural communities.

(b) REPORT.—The agreement under subsection (a) shall specify that, not later than 1 year after the date of enactment of this Act, the National Academy of Sciences shall submit to Congress a report containing the results and findings of study authorized under this section.

Page 5, in the table of contents, after the matter related to section 3114, insert the following:

Sec. 3115. National Academy of Sciences study on carbon capture technology.

24. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE ESCOBAR OF TEXAS OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 223, lines 18 through 21, strike paragraph (2) and insert the following:

(2) The term “institution of higher education”—

(A) has the meaning given such term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001); and

(B) includes a minority-serving institution.

(3) The term “minority-serving institution” has the meaning given the term “eligible institution” in section 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1067q(a)).

Page 223, line 22, redesignate paragraph (3) as paragraph (4).

Page 224, lines 1 and 4, redesignate paragraphs (4) and (5) as paragraphs (5) and (6).

Page 225, after line 20, insert the following:

(4) SPECIAL CONSIDERATION.—With respect to applications under paragraph (3), the Secretary shall give special consideration to applications from minority-serving institutions or a multi-institutional consortium which includes a minority-serving institution.

25. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE FINKENAUER OF IOWA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 9, after the item relating to section 12606, insert the following:

Sec. 12607. Labor Standards.

At the end of subtitle F, insert the following:

**SEC. 12607 LABOR STANDARDS.**

(a) **IN GENERAL.**—Notwithstanding any other provision of law, for fiscal year 2021 and each fiscal year thereafter, any construction or maintenance projects, including installation or removal of applicable infrastructure, assisted in whole or in part by funds appropriated under sections 1203, 1221, 1802, 1803, 1804, 1805, 2122, 2401, 2502, 2503, 2504, 2505, 2522, 2523, 2524, 2525, 2542, 2543, 2544, 2545, 2547, 2552, 2553, 2561, 3102, 3103, 3104, 3105, 3106, 3107, 3109, 3110, 3111, 3112, 3201, 4101, 4202, 5101, 5301, 5302, 5321, 5322, 5323, 5324, 5341, 5342, 6201, 6301, 6502, 6512, 7001, 8101, 8102, 8206, 8304, 9105, 9302, 9304, 10121, and 12401 of this Act and including 42 U.S.C. 17011 and 42 U.S.C. 16061, without regard to the form or type of Federal assistance provided under such section or part, shall comply with labor standards under this section. Compliance with labor standards under this section shall also apply to entities that are awarded permits, leases or enter into agreements with the Federal Government under subtitle F of Title II of this Act.

(b) **CERTIFICATION OF QUALIFIED ENTITIES.**—

(1) **IN GENERAL.**—The Secretary of Labor shall establish a process for certifying entities that submit an application under paragraph (2) as qualified entities with respect to construction and maintenance projects funded in part or whole under sections 1203, 1221, 1802, 1803, 1804, 1805, 2122, 2401, 2502, 2503, 2504, 2505, 2522, 2523, 2524, 2525, 2542, 2543, 2544, 2545, 2547, 2552, 2553, 2561, 3102, 3103, 3104, 3105, 3106, 3107, 3109, 3110, 3111, 3112, 3201, 4101, 4202, 5101, 5301, 5302, 5321, 5322, 5323, 5324, 5341, 5342, 6201, 6301, 6502, 6512, 7001, 8101, 8102, 8206, 8304, 9105, 9302, 9304, 10121, and 12401 of this Act and including 42 U.S.C. 17011 and 42 U.S.C. 16061.

(2) **APPLICATION PROCESS.**—An entity seeking certification as a qualified entity under this section shall submit an application to the Secretary of Labor at such time, in such manner, and containing such information as the Secretary may reasonably require, including information to demonstrate compliance with the requirements under subsection (c).

(3) **REQUESTS FOR ADDITIONAL INFORMATION.**—Not later than 1 year after receiving an application from an entity under paragraph (2)—

(A) the Secretary of Labor may request additional information from the entity in order to determine whether the entity is in compliance with the requirements under subsection (c); and

(B) the entity shall provide such additional information within 30 days of the Secretary of Labor's request under subparagraph (A).

(4) **DETERMINATION DEADLINE.**—The Secretary of Labor shall make a determination on whether to certify an entity under this section not later than—

(A) in a case in which the Secretary requests additional information described in paragraph (3), 1 year after the Secretary receives such additional information from the entity, or

(B) in a case that is not described in paragraph (3)(A), 1 year after the date on which the entity submits the application under paragraph (2).

(5) **PRECERTIFICATION REMEDIES.**—The Secretary shall consider any corrective actions taken by an entity seeking certification under this subsection to remedy an administrative merits determination, arbitral award or decision, or civil judgment identified under subsection (c)(3) and shall impose as a condition of certification any additional remedies necessary to avoid further or repeated violations.

(c) **LABOR STANDARDS REQUIREMENTS.**—The Secretary of Labor shall require an entity, as a condition of certification under this section, to satisfy each of the following requirements:

(1) The entity shall ensure that all laborers and mechanics employed by contractors and subcontractors in the performance of any construction or maintenance project shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”).

(2) In the case of any construction or maintenance project, the cost of which exceeds \$25,000,000, the entity shall be a party to, or require contractors and subcontractors in the performance of such construction or maintenance project to consent to, a covered project labor agreement.

(3) The entity, and all contractors and subcontractors in performance of any construction or maintenance project, shall represent in the application submitted under subsection (b)(2) (and periodically thereafter during the performance of the construction or maintenance project as the Secretary of Labor may require) whether there has been any administrative merits determination, arbitral award or decision, or civil judgment, as defined in guidance issued by the Secretary of Labor, rendered against the entity in the preceding 3 years (or, in the case of disclosures after the initial disclosure, during such period as the Secretary of Labor may provide) for violations of—

(A) the Fair Labor Standards Act of 1938 (29 U.S.C. 201 et seq.);

(B) the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.);

(C) the Migrant and Seasonal Agricultural Worker Protection Act (29 U.S.C. 1801 et seq.);

(D) the National Labor Relations Act (29 U.S.C. 151 et seq.);

(E) subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”);

(F) chapter 67 of title 41, United States Code (commonly known as the “Service Contract Act”);

(G) Executive Order 11246, as amended (relating to equal employment opportunity);

(H) section 503 of the Rehabilitation Act of 1973 (29 U.S.C. 793);

(I) section 4212 of title 38, United States Code;

(J) the Family and Medical Leave Act of 1993 (29 U.S.C. 2601 et seq.);

(K) title VII of the Civil Rights Act of 1964 (42 U.S.C. 2000e et seq.);

(L) the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.);

(M) the Age Discrimination in Employment Act of 1967 (29 U.S.C. 621 et seq.);

(N) Executive Order 13658, dated February 2014, (entitled “Establishing a Minimum Wage for Contractors”); or

(O) equivalent State laws, as defined in guidance issued by the Secretary of Labor.

(4) The entity, and all contractors and subcontractors in the performance of construction or maintenance project, shall not require arbitration for any dispute involving an employee described in paragraph (5) engaged in a service for the entity or any contractor and subcontractor, or enter into any agreement with such employee requiring arbitration of any such dispute, unless such employee is covered by a collective bargaining agreement that provides otherwise.

(5) For purposes of compliance with the National Labor Relations Act (29 U.S.C. 151 et seq.), the Fair Labor Standards Act of 1938 (29 U.S.C. 201 et seq.), and the requirements under this section, the entity, and all contractors and subcontractors in the performance of any construction or maintenance project, shall consider an individual performing any service in such performance as an employee (and not an independent contractor) of the entity, contractor, or subcontractor, respectively, unless—

(A) the individual is free from control and direction in connection with the performance of the service, both under the contract for the performance of the service and in fact;

(B) the service is performed outside the usual course of the business of the entity, contractor, or subcontractor, respectively; and

(C) the individual is customarily engaged in an independently established trade, occupation, profession, or business of the same nature as that involved in such service.

(6) The entity shall prohibit all contractors and subcontractors in the performance of any construction or maintenance project from hiring employees through a temporary staffing agency unless the relevant State workforce agency certifies that temporary employees are necessary to address an acute, short-term labor demand.

(7) The entity shall require all contractors, subcontractors, successors in interest of the entity, and other entities that may acquire the entity, in the performance or acquisition of any construction or maintenance project, to have and abide by an explicit neutrality policy on any issue involving the exercise by employees of the entity as described in paragraph (5), and of all contractors and subcontractors in the performance of any construction or maintenance project, of the right to organize and bargain collectively through representatives of their own choosing.

(8) The entity shall require all contractors and subcontractors to participate in a registered apprenticeship program for each skilled craft employed on any construction or maintenance project.

(9) The entity, and all contractors and subcontractors in the performance of any construction or maintenance project, shall not request or otherwise consider the criminal history of an applicant for employment before extending a conditional offer to the applicant, unless

(A) a background check is otherwise required by law;

(B) the position is for a Federal law enforcement officer (as defined in section 115(c)(1) of title 18, United States Code) position; or

(C) the Secretary of Labor, after consultation with the Secretary of Energy, certifies that precluding criminal history prior to the conditional offer would pose a threat to national security.

(d) DAVIS-BACON ACT.—The Secretary of Labor shall have, with respect to the labor standards described in subsection (d)(1), the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

(e) PERIOD OF VALIDITY FOR CERTIFICATIONS.—A certification made under this section shall be in effect for a period of 5 years. An entity may

reapply to the Secretary of Labor for an additional certification under this section in accordance with the application process under subsection (b)(2).

(f) REVOCATION OF QUALIFIED ENTITY STATUS.—The Secretary of Labor may revoke the certification of an entity under this section as a qualified entity at any time in which the Secretary reasonably determines the entity is no longer in compliance with the requirements of subsection (c).

(g) CERTIFICATION MAY COVER MORE THAN 1 SUBSTANTIALLY SIMILAR PROJECT.—The Secretary of Labor may make certifications under this section which apply with respect to more than 1 project if the projects to which such certification apply are substantially similar projects which meet the requirements of this section. Such projects shall be treated as a specific construction or maintenance project for purposes of subsection (h)(2).

(h) DEFINITIONS.—In this section:

(1) COVERED PROJECT LABOR AGREEMENT.—The term “covered project labor agreement” means a project labor agreement that

(A) binds all contractors and subcontractors on the construction project through the inclusion of appropriate specifications in all relevant solicitation provisions and contract documents;

(B) allows all contractors and subcontractors to compete for contracts and subcontracts without regard to whether they are otherwise a party to a collective bargaining agreement;

(C) contains guarantees against strikes, lockouts, and other similar job disruptions;

(D) sets forth effective, prompt, and mutually binding procedures for resolving labor disputes arising during the covered project labor agreement; and

(E) provides other mechanisms for labor-management cooperation on matters of mutual interest and concern, including productivity, quality of work, safety, and health.

(2) PROJECT LABOR AGREEMENT.—The term “project labor agreement” means a pre-hire collective bargaining agreement with one or more labor organizations that establishes the terms and conditions of employment for a specific construction project and is described in section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)).

(3) QUALIFIED ENTITY.—The term “qualified entity” means an applicant for certification under subsection (b) that the Secretary of Labor certifies as a qualified entity in accordance with subsection (b).

(i) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this such sums as necessary for fiscal year 2020 and each fiscal year thereafter.

26. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
GARAMENDI OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

At the end of subtitle C of title XII, add the following:

**SEC. \_\_. EXTENSION OF AUTHORITY FOR NON-OIL AND GAS OPERATIONS ON  
THE OUTER CONTINENTAL SHELF.**

Section 4(a)(1) of the Outer Continental Shelf Lands Act (43 U.S.C.  
1333(a)(1)) is amended to read as follows:

**“(1) JURISDICTION OF THE UNITED STATES ON THE OUTER  
CONTINENTAL SHELF.—**

**“(A) IN GENERAL.—**The Constitution and laws and civil and  
political jurisdiction of the United States are extended, to the same  
extent as if the outer Continental Shelf were an area of exclusive  
Federal jurisdiction located within a State, to—

**“(i) the subsoil and seabed of the outer Continental Shelf;**

**“(ii) all artificial islands on the outer Continental Shelf;**

**“(iii) all installations and other devices permanently or  
temporarily attached to the seabed, which may be erected  
thereon for the purpose of exploring for, developing, or  
producing resources therefrom or producing or supporting the  
production of energy from sources other than oil and gas; and**

**“(iv) any such installation or other device (other than a ship  
or vessel) for the purpose of transporting such resources or  
transmitting energy.**

**“(B) LEASES ISSUED EXCLUSIVELY UNDER THIS ACT.—**  
Mineral or energy leases on the outer Continental Shelf shall be  
maintained or issued only under the provisions of this Act.”.



27. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
GOLDEN OF MAINE OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 202, line 24, strike “; and” and insert a semicolon.

Page 203, line 2, strike the semicolon and insert “; and”.

Page 203, after line 2, insert the following:

(iv) biomass systems with an efficiency of 60 percent or greater;

Page 203, line 8, strike “; or” and insert a semicolon.

Page 203, line 11, strike the period at the end and insert “; or”.

Page 203, after line 11, insert the following:

(F) to provide thermal energy to meet heating and cooling loads and for industrial processes.

Page 716, line 21, insert “, including the potential use of biomass CHP systems” before the semicolon.

Page 717, line 1, insert “biomass CHP,” after “technologies,”.

Page 717, line 6, insert “and communities” after “organizations”.

Page 717, line 10, insert “, communities,” after “companies”.

Page 821, line 15, insert “biomass,” after “wind,”.

Page 824, line 23, insert “biomass,” after “hydropower,”.

28. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
GRAVES OF LOUISIANA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 236, line 4, strike "and".

Page 236, after line 4, insert the following:

(ii) the ability to domestically source necessary critical  
mineral necessary for solar production; and

Page 236, line 5, strike "(ii)" and insert "(iii)".

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29. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
GRAVES OF LOUISIANA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 707, line 3, after “cost-competitive” insert “, including in developing economies”.

30. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
GRAVES OF LOUISIANA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 466, line 23, after “program” insert “including increases or decreases in net imports of critical minerals as a result of activities carried out under this section”.

31. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
HAALAND OF NEW MEXICO OR HER DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 391, line 10, strike "or".

Page 391, line 12, strike "entities;" and insert "entities; or".

Page 391, after line 12 insert:

(E) that does not require extraction of uranium or development of uranium from lands managed by the Federal Government, cause harm to the natural or cultural resources of Tribal communities or sovereign Native Nations, or result in degraded ground or surface water quality on publicly managed or privately owned lands;

32. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
HAALAND OF NEW MEXICO OR HER DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 4, in the table of contents, after the matter relating to section 2562,  
insert the following:

**PART 5—ENERGY EFFICIENCY AND RENEWABLE ENERGY  
RESEARCH AND DEVELOPMENT**

Sec. 2571. Authorization of appropriations.

Page 241, strike lines 21 through 25 and insert the following:

- (1) \$441,000,000 for fiscal year 2021;
- (2) \$463,050,000 for fiscal year 2022;
- (3) \$486,202,500 for fiscal year 2023;
- (4) \$510,512,625 for fiscal year 2024; and
- (5) \$536,038,257 for fiscal year 2025.

Page 254, strike lines 4 through 8 and insert the following:

- (1) \$163,800,000 for fiscal year 2021;
- (2) \$171,990,000 for fiscal year 2022;
- (3) \$180,589,500 for fiscal year 2023;
- (4) \$189,618,975 for fiscal year 2024; and
- (5) \$199,099,923 for fiscal year 2025.

Page 275, strike lines 4 through 8 and insert the following:

- “(1) \$182,062,500 for fiscal year 2021;
- “(2) \$199,125,000 for fiscal year 2022;
- “(3) \$216,187,500 for fiscal year 2023;
- “(4) \$225,750,000 for fiscal year 2024; and
- “(5) \$227,812,500 for fiscal year 2025.”.

Strike page 295, line 23, through page 296, line 18, and insert the  
following:

“(1) \$229,125,000 for fiscal year 2021, including \$168,870,000 for  
marine energy and \$60,255,000 for hydropower research, development,  
and demonstration activities;

“(2) \$236,517,450 for fiscal year 2022, including \$174,454,800 for  
marine energy and \$62,062,650 for hydropower research, development,  
and demonstration activities;

“(3) \$244,187,873 for fiscal year 2023, including \$180,263,343 for  
marine energy and \$63,924,530 for hydropower research, development,  
and demonstration activities;

“(4) \$252,147,209 for fiscal year 2024, including \$186,304,944 for  
marine energy and \$65,842,265 for hydropower research, development,  
and demonstration activities; and

“(5) \$260,406,837 for fiscal year 2025, including \$192,589,304 for  
marine energy and \$67,817,533 for hydropower research, development,  
and demonstration activities.”.

Page 299, after line 8, insert the following:

**PART 5—ENERGY EFFICIENCY AND RENEWABLE ENERGY  
RESEARCH AND DEVELOPMENT**

**SEC. 2571. AUTHORIZATION OF APPROPRIATIONS.**

There are authorized to be appropriated to the Secretary of Energy or  
their designee to carry out research, development, demonstration, and  
commercial application activities under the Office of Energy Efficiency and  
Renewable Energy—

- (1) \$3,228,500,000 for fiscal year 2021;
- (2) \$3,250,775,500 for fiscal year 2022;

- (3) \$3,291,488,750 for fiscal year 2023;
- (4) \$3,334,238,188 for fiscal year 2024; and
- (5) \$3,379,125,097 for fiscal year 2025.

33. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
HARDER OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

Redesignate section 12606 as section 12607.

Insert after section 12605 the following new section:

**SEC. 12606. WILDFIRE HAZARD SEVERITY MAPPING FOR ELECTRIC TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE.**

(a) **MAP REQUIRED.**—Not later than 2 years after the date of the enactment of this section, the Secretary of Energy shall—

(1) use the most recent **LANDFIRE** data to generate a geospatial map for the conterminous United States that depicts wildfire risk to electric utilities that—

(A) manage electric transmission infrastructure or rights-of-ways on public lands; and

(B) maintain equipment that is at risk of igniting or being impacted by wildland fire; and

(2) disseminate the information generated under paragraph (1) in an appropriate format for use by electric utilities in order to—

(A) improve understanding of wildfire risk;

(B) identify areas and assets at the highest risk;

(C) prioritize infrastructure maintenance and vegetation management;

(D) identify opportunities for energy storage and microgrid projects; and

(E) develop plans for regular and emergency access to manage and mitigate wildfire risk.

(b) **CONSULTATION.**—In carrying out subsection (a), the Secretary of Energy shall consult with—

(1) the Secretary of Agriculture, acting through the Chief of the Forest Service;

(2) the Secretary of the Interior;

(3) the Administrator of the Federal Emergency Management Agency;

(4) other appropriate Federal agencies;

(5) States;

(6) relevant colleges, universities, and institutions of higher education with relevant expertise; and

(7) other entities, as appropriate.

(c) **ELECTRIC UTILITY DEFINED.**—In this section, the term “electric utility” means—

(1) a rural electric cooperative;

(2) a political subdivision of a State, such as a municipally owned electric utility, or any agency, authority, corporation, or instrumentality of one or more State political subdivisions; and

(3) an investor-owned utility.



34. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
HARDER OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 891, line 12, insert “(as defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)))” after “education”.

Page 891, line 15, insert “, outreach, and community engagement,” after “research”.

Page 891, line 16, insert “, including the health of outdoor workers,” after “public health”.

Page 891, after line 20, insert the following (and redesignate the subsequent subparagraph accordingly):

(B) PRIORITY.—In selecting institutions of higher education at which to establish a center under subparagraph (A), the Administrator shall give priority to institutions that—

(i) have established expertise or dedicated centers for air quality research;

(ii) have experience with relevant outreach and extension work;

(iii) have established relationships with relevant Federal, State, and local agencies, community organizations, and Indian Tribes; and

(iv) are located in an area that is economically or environmentally impacted by wildfire smoke.

Page 893, line 18, strike “require.” and insert “require, which shall include plans to collaborate with a public institution of higher education or other research institution that—”.

Page 893, after line 18, insert the following:

(A) has established expertise or dedicated centers for air quality research;

(B) has experience with relevant outreach and extension work;

(C) has established relationships with relevant Federal, State, and local agencies, community organizations, and Indian Tribes; and

(D) is located in an area that is economically or environmentally impacted by wildfire smoke.

35. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE HAYES OF CONNECTICUT OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 536, lines 1 through 15, amend subsection (e) to read as follows:

(e) AUTHORIZATION OF APPROPRIATIONS.—Subsection (f), as redesignated, of section 741 of the Energy Policy Act of 2005 (42 U.S.C. 16091) is amended to read as follows:

“(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator to carry out this section, to remain available until expended, \$130,000,000 for each of fiscal years 2021 through 2025, of which—

“(1) not less than \$100,000,000 for each such fiscal year shall be used for awards under this section to eligible recipients proposing to replace school buses with zero-emission school buses; and

“(2) not less than \$52,000,000 for each such fiscal year shall be used for awards under this section to eligible recipients proposing to replace or retrofit school buses to serve a community of color, indigenous community, low-income community, or any community located in an air quality area designated pursuant to section 107 of the Clean Air Act (42 U.S.C. 7407) as nonattainment.”.

36. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE HAYES OF CONNECTICUT OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 9, after the item relating to section 12606, insert the following:

Sec. 12607. Affirming Protections for Children and Workers.

At the end of subtitle F of Title XII, add the following:

**SEC. 12607. AFFIRMING PROTECTIONS FOR CHILDREN AND WORKERS.**

Nothing in this Act shall be construed to affect the safety and wellbeing of children in the carrying out of projects, programs, and other applicable items in this Act nor to undermine or affect the enforcement of laws relating to protections against child labor and forced labor, including—

- (1) the Fair Labor Standards Act of 1938 (29 U.S.C. 201 et seq.);
- (2) title 29, subtitle B, chapter V, Subchapter A, Part 570, the Child Labor Regulations, Orders, and Statements of Interpretation;
- (3) article 3 of the International Labor Organization Convention concerning the prohibition and immediate action for the elimination of the worst forms of child labor (December 2, 2000), or in violation of human rights;
- (4) number 182 of the International Labor Organization Convention, entitled “Worst Forms of Child Labour Convention” (1999);
- (5) number 105 of the International Labor Organization Convention, entitled “Abolition of Forced Labour Convention” (1957);
- (6) applicable trade laws, including trade preference programs, trade agreements and Section 307 of the Tariff Act of 1930; and
- (7) Executive Order 13126, dated June 12, 1999, (entitled “Prohibition of Acquisition of Products Produced by Forced or Indentured Child Labor”).

37. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE HUFFMAN OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

At the end of subtitle B of title II, add the following:

**SEC. 2208. KLAMATH HYDROELECTRIC SETTLEMENT AGREEMENT TRIBAL FAIRNESS.**

(a) **DEFINITIONS.**—In this section:

(1) **FACILITY.**—The term “facility” means 1 or more of the following hydropower facilities (including appurtenant works licensed to PacifiCorp) within the jurisdictional boundary of the Klamath Hydroelectric Project, FERC Project No. 2082 (as applicable):

- (A) Iron Gate Dam.
- (B) Copco No. 1 Dam.
- (C) Copco No. 2 Dam.
- (D) J.C. Boyle Dam.

(2) **COMMISSION.**—The term “Commission” means the Federal Energy Regulatory Commission.

(3) **HARMED INDIAN TRIBES.**—The term “harmed Indian Tribes” means—

- (A) the Klamath Tribes; and
- (B) such other Indian Tribes that are located downstream of the Klamath Hydroelectric Project.

(4) **INDIAN TRIBE.**—The term “Indian Tribe” has the meaning given the term “Indian tribe” in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(5) **LICENSEE.**—The term “licensee” means the owner and licensee of the facility (as of the date of enactment of this Act).

(b) **IN GENERAL.**—In light of the specific facts and circumstances of the Klamath Hydroelectric Settlement Agreement that anticipated dam removal to commence in 2020, and to mitigate the historic and ongoing damages caused by the facility to aquatic and Tribal trust resources, the Commission shall not issue any annual license for the facility under section 15(a)(1) of the Federal Power Act (16 U.S.C. 808(a)(1)) unless the Commission has provided harmed Indian Tribes and the States of California and Oregon the opportunity to recommend terms and conditions under section 4(e), section 10, and section 18 of the Federal Power Act (16 U.S.C. 797(e), 803, and 811), including any conditions providing for fishways or fish recovery.

(c) **STUDIES.**—Upon approval of an annual license pursuant to subsection (b), the Commission shall require the licensee to provide to the Commission the following:

(1) A study describing the impacts of the facility during the previous year on instream flows, water use, water temperature, and water quality.

(2) A study describing the impacts of the facility during the previous year on fish and wildlife resources, including river fisheries, reservoir fisheries, anadromous fish, and any marine species listed as a threatened species or endangered species under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) including Southern Resident killer whales (*Orcinus orca*).

(3) A study describing the impacts of the facility during the previous year on sediment transport.

(4) A study forecasting the impacts of climate change to power generation at the facility.

(5) A certification from the California Department of Water Resources, Division of Safety of Dams, following one or more comprehensive studies of the stability and safety of the facility that are funded by the licensee, that each element of the facility meets all current Federal and State seismic, stability, and safety standards and that there will be no significant risk of dam failure during the term of the license.

(6) A report, to be made publicly available by the Commission, on the financial status of the facility, including—

(A) an analysis comparing the cost of power generated at the facility to revenue attributable to the facility during the preceding year;

(B) a projection of the cost of power generated at the facility and the revenue attributable to the facility during the 5-year period beginning on the date of the license;

(C) an explanation of whether the financial terms of the Klamath Hydroelectric Settlement Agreement, as amended, have been met; and

(D) a detailed description of the annual costs associated with the facility that are passed through to the ratepayers of the licensee.

(d) EXCEPTION.—The requirements of this section shall not apply to any entity filing a surrender application as specified in the Commission's order relating to the facility dated July 16, 2020 (172 FERC 61,062).

(e) LEGAL CLAIMS.—Nothing in this section shall be construed to adversely affect any legal claims of harmed Indian Tribes, including claims for violations of any Executive Order pertaining to one or more Indian Tribes, any treaty between the United States and one or more Indian Tribes, or for damages caused by the facility under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) or the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.). Such claims shall not be limited by any statute of limitations.

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38. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
KUSTER OF NEW HAMPSHIRE OR HER DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 823, line 21, strike "\$20,000,000" and insert "\$40,000,000".

39. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LAMB  
OF PENNSYLVANIA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 432, after line 15, insert the following:

## **Subtitle C—FUSION ENERGY RESEARCH**

### **SEC. 4301. FUSION ENERGY RESEARCH.**

(a) PROGRAM.—Section 307 of the Department of Energy Research and Innovation Act (42 U.S.C. 18645) is amended—

(1) by redesignating subsections (a) through (g) as subsections (b) through (h), respectively;

(2) by inserting before subsection (b), as so redesignated, the following:

“(a) PROGRAM.—As part of the activities authorized under section 209 of the Department of Energy Organization Act (42 U.S.C. 7139) and section 972 of the Energy Policy Act of 2005 (42 U.S.C. 16312), the Director shall carry out a fusion energy sciences research and enabling technology development program to effectively address the scientific and engineering challenges to building a cost competitive fusion power plant and to establish a competitive fusion power industry in the United States. As part of this program, the Director shall carry out research activities to expand the fundamental understandings of plasmas and matter at very high temperatures and densities for fusion applications and for other plasma science applications.”;

(3) by amending subsection (d) to read as follows:

“(d) INERTIAL FUSION RESEARCH AND DEVELOPMENT.—

“(1) IN GENERAL.—The Director shall carry out a program of research and technology development in inertial fusion for energy applications, including ion beam, laser, and pulsed power fusion systems.

“(2) ACTIVITIES.—As part of the program described in paragraph (1), the Director shall support activities at and partnerships with universities and the National Laboratories to—

“(A) develop novel target designs;

“(B) support modeling of various inertial fusion energy concepts and systems;

“(C) develop diagnostic tools; and

“(D) improve inertial fusion energy driver technologies.

“(3) AUTHORIZATION OF APPROPRIATIONS.—Out of funds authorized to be appropriated under subsection (o), there are authorized to be appropriated to the Secretary to carry out the activities described in subsection (d)—

“(A) \$25,000,000 for fiscal year 2021;

“(B) \$26,250,000 for fiscal year 2022;

“(C) \$27,563,000 for fiscal year 2023;

“(D) \$28,941,000 for fiscal year 2024; and

“(E) \$30,377,000 for fiscal year 2025.”;

(4) by amending subsection (e) to read as follows:

“(e) ALTERNATIVE AND ENABLING CONCEPTS.—

“(1) IN GENERAL.—The Director shall support research and development activities and facility operations at institutions of higher education, National Laboratories, and private facilities in the United States for a portfolio of alternative and enabling fusion energy concepts

that may provide solutions to significant challenges to the establishment of a commercial magnetic fusion power plant, prioritized based on the ability of the United States to play a leadership role in the international fusion research community.

“(2) ACTIVITIES.—Fusion energy concepts and activities explored under paragraph (1) may include—

“(A) alternative fusion energy concepts, including—

“(i) advanced stellarator concepts;

“(ii) non-tokamak confinement configurations operating at low magnetic fields;

“(iii) magnetized target fusion energy concepts; or

“(iv) other promising fusion energy concepts identified by the Director;

“(B) enabling fusion technology development activities, including—

“(i) high magnetic field approaches facilitated by high temperature superconductors;

“(ii) liquid metals to address issues associated with fusion plasma interactions with the inner wall of the encasing device; and

“(iii) advanced blankets for heat management and fuel breeding; and

“(C) advanced scientific computing activities.

“(3) INNOVATION NETWORK FOR FUSION ENERGY.—

“(A) IN GENERAL.—The Secretary, acting through the Office of Science, shall support a program to provide fusion energy researchers with access to scientific and technical resources and expertise at facilities supported by the Department, including such facilities at National Laboratories and universities, to advance innovative fusion energy technologies toward commercial application.

“(B) AWARDS.—Financial assistance under the program established in subsection (a) may be in the form of grants, vouchers, equipment loans, or contracts to private entities.

“(3) AUTHORIZATION OF APPROPRIATIONS.—Out of funds authorized to be appropriated under subsection (o), there are authorized to be appropriated to the Secretary to carry out the activities described in subsection (e)—

“(A) \$100,000,000 for fiscal year 2021;

“(B) \$105,000,000 for fiscal year 2022;

“(C) \$110,250,000 for fiscal year 2023;

“(D) \$115,763,000 for fiscal year 2024; and

“(E) \$121,551,000 for fiscal year 2025.”; and

(5) by adding at the end the following:

“(i) MILESTONE-BASED DEVELOPMENT PROGRAM.—

“(1) IN GENERAL.—Using the authority of the Secretary under section 646(g) of the Department of Energy Organization Act (42 U.S.C. 7256(g)), notwithstanding paragraph (10) of such section, the Secretary shall establish, within 3 months of enactment of this Act, a milestone-based fusion energy development program that requires projects to meet particular technical milestones before a participant is awarded funds by the Department.

“(2) PURPOSE.—The purpose of the program established by paragraph (1) shall be to support the development of a U.S.-based fusion power industry through the research and development of technologies that will enable the construction of new full-scale fusion systems capable of demonstrating significant improvements in the performance of such systems, as defined by the Secretary, within 10 years of the enactment of this Act.



“(3) ELIGIBILITY.—Any entity is eligible to participate in the program provided that the Under Secretary has deemed it as having the necessary resources and expertise.

“(4) REQUIREMENTS.—In carrying out the milestone-based program under paragraph (1), the Secretary shall, for each relevant project—

“(A) request proposals from eligible entities, as determined by the Secretary, that include proposed technical milestones, including estimated project timelines and total costs;

“(B) set milestones based on a rigorous technical review process;

“(C) award funding of a predetermined amount to projects that successfully meet proposed milestones under paragraph (1), or for expenses deemed reimbursable by the Secretary, in accordance with terms negotiated for an individual award; and

“(D) communicate regularly with selected eligible entities and, if the Secretary deems appropriate, exercise small amounts of flexibility for technical milestones as projects mature.

“(5) AWARDS.—For the program established under paragraph (1)—

“(A) an award recipient shall be responsible for all costs until milestones are achieved, or reimbursable expenses are reviewed and verified by the Department; and

“(B) should an awardee not meet the milestones described in paragraph (4), the Secretary may end the partnership with an award recipient and use the remaining funds in the ended agreement for new or existing projects carried out under this section.

“(6) APPLICATIONS.—Any project proposal submitted to the program under paragraph (1) shall be evaluated based upon its scientific, technical, and business merits through a peer-review process, which shall include reviewers with appropriate expertise from the private sector, the investment community, and experts in the science and engineering of fusion and plasma physics.

“(7) PROJECT MANAGEMENT.—In carrying out projects under this program and assessing the completion of their milestones in accordance with paragraph (4), the Secretary shall consult with experts that represent diverse perspectives and professional experiences, including those from the private sector, to ensure a complete and thorough review.

“(8) PROGRAMMATIC REVIEW.—Not later than 4 years after the Secretary has established 3 milestones under this program, the Secretary shall enter into a contractual arrangement with the National Academy of Sciences to review and provide a report describing the findings of this review to the House Committee on Science, Space, and Technology and the Senate Committee on Energy and Natural Resources on the program established under this paragraph (1) that assesses—

“(A) the benefits and drawbacks of a milestone-based fusion program as compared to traditional program structure funding models at the Department;

“(B) lessons-learned from program operations; and

“(C) any other matters the Secretary determines regarding the program.

“(9) ANNUAL REPORT.—As part of the annual budget request submitted for each fiscal year, the Secretary shall provide the House Committee on Science, Space, and Technology and the Senate Committee on Energy and Natural Resources a report describing partnerships supported by the program established under paragraph (1) during the previous fiscal year.

“(10) AUTHORIZATIONS FOR APPROPRIATIONS.—Out of funds authorized to be appropriated under subsection (o), there are authorized

to be appropriated to the Secretary to carry out the activities described in subsection (i), to remain available until expended—

- “(A) \$45,000,000 for fiscal year 2021;
- “(B) \$110,000,000 for fiscal year 2022;
- “(C) \$140,000,000 for fiscal year 2023;
- “(D) \$110,000,000 for fiscal year 2024; and
- “(E) \$45,000,000 for fiscal year 2025.

“(j) FUSION REACTOR SYSTEM DESIGN.—The Director shall support research and development activities to design future fusion reactor systems and examine and address the technical drivers for the cost of these systems.

“(k) GENERAL PLASMA SCIENCE AND APPLICATIONS.—The Director shall support research in general plasma science and high energy density physics that advance the understanding of the scientific community of fundamental properties and complex behavior of matter to control and manipulate plasmas for a broad range of applications, including support for research relevant to advancements in chip manufacturing and microelectronics.

“(l) SENSE OF CONGRESS.—It is the sense of Congress that the United States should support a robust, diverse program in addition to providing sufficient support to, at a minimum, meet its commitments to ITER and maintain the schedule of the project as determined by the Secretary in coordination with the ITER Organization at the time of the enactment of this Act. It is further the sense of Congress that developing the scientific basis for fusion, providing research results key to the success of ITER, and training the next generation of fusion scientists are of critical importance to the United States and should in no way be diminished by participation of the United States in the ITER project.

“(m) INTERNATIONAL COLLABORATION.—The Director shall—

“(1) as practicable and in coordination with other appropriate Federal agencies as necessary, ensure the access of United States researchers to the most advanced fusion research facilities and research capabilities in the world, including ITER;

“(2) to the maximum extent practicable, continue to leverage United States participation ITER, and prioritize expanding international partnerships and investments in current and future fusion research facilities within the United States; and

“(3) to the maximum extent practicable, prioritize engagement in collaborative efforts in support of future international facilities that would provide access to the most advanced fusion research facilities in the world to United States researchers.

“(n) FISSION AND FUSION RESEARCH COORDINATION REPORT.—

“(1) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary shall transmit to Congress a report addressing opportunities for coordinating fusion energy research and development activities between the Office of Nuclear Energy and the Office of Science.

“(2) COMPONENTS.—The report shall assess opportunities for collaboration on research and development of—

“(A) liquid metals to address issues associated with fusion plasma interactions with the inner wall of the encasing device and other components within the reactor;

“(B) immersion blankets for heat management and fuel breeding;

“(C) technologies and methods for instrumentation and control;

“(D) computational methods and codes for system operation and maintenance;

“(E) codes and standard development;

“(F) radioactive waste handling;

“(G) radiological safety;

“(H) potential for non-electricity generation applications; and

“(I) any other overlapping priority as identified by the Director of the Office of Science or the Assistant Secretary of Energy for Nuclear Energy.

“(3) IMPLEMENTATION.—The Secretary shall implement the recommendations made by the report directed in this section upon transmission of the report to Congress.

“(o) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out the activities described in this section—

“(1) \$976,000,000 for fiscal year 2021;

“(2) \$1,033,000,000 for fiscal year 2022;

“(3) \$1,104,000,000 for fiscal year 2023;

“(4) \$1,181,000,000 for fiscal year 2024; and

“(5) \$1,264,000,000 for fiscal year 2025.”

(b) ITER.—Section 972(c) of the Energy Policy Act of 2005 (42 U.S.C. 16312) is amended to read as follows:

“(c) UNITED STATES PARTICIPATION IN ITER.—

“(1) IN GENERAL.—There is authorized United States participation in the construction and operations of the ITER project, as agreed to under the April 25, 2007 ‘Agreement on the Establishment of the ITER International Fusion Energy Organization for the Joint Implementation of the ITER Project’. The Director shall coordinate and carry out the responsibilities of the United States with respect to this Agreement.

“(2) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report providing an assessment of the most recent schedule for ITER that has been approved by the ITER Council.

“(3) AUTHORIZATION OF APPROPRIATIONS.—Out of funds authorized to be appropriated under section 307(o) of the Department of Energy Research and Innovation Act (42 U.S.C. 18645), there shall be made available to the Secretary to carry out the construction of ITER—

“(A) \$374,000,000 for fiscal year 2021; and

“(B) \$300,000,000 for each of fiscal years 2022 through 2025.”

Page 5, in the table of contents, after the matter related to subtitle B of title IV, insert the following:

#### Subtitle C—FUSION ENERGY RESEARCH

Sec. 4301. Fusion energy research

40. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LAMB  
OF PENNSYLVANIA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 426, add after line 14 the following (and redesignate subsequent subsections accordingly):

“(d) MILESTONE-BASED DEMONSTRATION PROJECTS.—The Secretary may carry out demonstration projects under subsection (c) as a milestone-based demonstration project under section 8304 of the Clean Economy Jobs and Innovation Act.”.

41. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LAMB OF PENNSYLVANIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 4, after the item relating to section 2562, insert the following:

Sec. 2563. Produced water research and development program.

Sec. 2564. Produced water demonstration program.

Page 299, after line 8, insert the following:

**SEC. 2563. PRODUCED WATER RESEARCH AND DEVELOPMENT PROGRAM.**

(a) **ESTABLISHMENT.**—As soon as possible after the date of enactment of this Act, the Secretary of Energy shall establish a research and development program on produced water to develop—

(1) new technologies and practices to reduce the environmental impact; and

(2) opportunities for reprocessing of produced water at natural gas or oil development sites.

(b) **PRIORITIZATION.**—The Secretary shall give priority to projects that develop and bring to market—

(1) effective systems for on-site management or repurposing of produced water; and

(2) new technologies or approaches to reduce the environmental impact of produced water on local water sources and the environment.

(c) **CONDUCT OF PROGRAM.**—In carrying out the program described in subsection (a), the Secretary shall carry out science-based research and development activities to pursue—

(1) improved efficiency, technologies, and techniques for produced water recycling stations; and

(2) alternative approaches to treating, reusing, storing, or decontaminating produced water.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated for purposes of this section \$10,000,000 for each of fiscal years 2020 through 2025.

**SEC. 2564. PRODUCED WATER DEMONSTRATION PROGRAM.**

(a) **ESTABLISHMENT.**—The Secretary of Energy shall establish a demonstration program for on-site treatment of produced water.

(b) **REQUIREMENTS.**—In developing the demonstration program under this section, the Secretary shall consult with the heads of other relevant Federal departments and agencies, including the Department of the Interior and the Environmental Protection Agency.

(c) **PRIORITIZATION.**—In carrying out this section, the Secretary should prioritize—

(1) first-of-a-kind or new approaches to treating produced water stationed on site; and

(2) technologies that can be used at natural gas or oil development sites to reduce other environmental harm either through emissions or other environmental impact.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated for purposes of this section \$10,000,000 for each of fiscal years 2020 through 2025.

42. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
LARSEN OF WASHINGTON OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

At the end of subtitle F of title XII, add the following:

**SEC. 2. STUDY ON CERTAIN CLIMATE CHANGE MITIGATION EFFORTS.**

(a) **IN GENERAL.**—Not later than 90 days after the date of enactment of this Act, the Secretary of Transportation shall seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine (referred to in this section as the “National Academies”) to conduct a study on climate change mitigation efforts with respect to the civil aviation and aerospace industries.

(b) **STUDY CONTENTS.**—In conducting the study under subsection (a), the National Academies shall—

(1) identify climate change mitigation efforts, including efforts relating to emerging technologies, in the civil aviation and aerospace industries;

(2) develop and apply an appropriate indicator for assessing the effectiveness of such efforts;

(3) identify gaps in such efforts;

(4) identify barriers preventing expansion of such efforts; and

(5) develop recommendations with respect to such efforts.

(c) **REPORTS.**—

(1) **FINDINGS OF STUDY.**—Not later than 1 year after the date on which the Secretary enters into an agreement for a study pursuant to subsection (a), the Secretary shall submit to the appropriate congressional committees the findings of the study.

(2) **ASSESSMENT.**—Not later than 180 days after the date on which the Secretary submits the findings pursuant to paragraph (1), the Secretary, acting through the Administrator of the Federal Aviation Administration, shall submit to the appropriate congressional committees a report that contains an assessment of the findings.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out this section \$1,500,000.

(e) **DEFINITIONS.**—In this section:

(1) **APPROPRIATE CONGRESSIONAL COMMITTEES.**—The term “appropriate congressional committees” means the Committee on Transportation and Infrastructure of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and other congressional committees determined appropriate by the Secretary.

(2) **CLIMATE CHANGE MITIGATION EFFORTS.**—The term “climate change mitigation efforts” means efforts, including the use of technologies, materials, processes, or practices, that contribute to the reduction of greenhouse gas emissions.

43. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LEE OF NEVADA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Amend subtitle C of title II to read as follows:

## **Subtitle C—Distributed Renewable Energy**

**SEC. 2301. DEFINITIONS.**

In this subtitle:

(1) **AUTHORITY HAVING JURISDICTION.**—The term “authority having jurisdiction” means any State, county, local, or Tribal office or official with jurisdiction—

(A) to issue permits;

(B) to conduct inspections to enforce the requirements of a relevant code or standard; or

(C) to approve the installation of, or the equipment and materials used in the installation of, qualifying distributed energy systems.

(2) **DISTRIBUTED ENERGY SYSTEM INSTALLER.**—The term “distributed energy system installer” means an entity or individual—

(A) with knowledge and skills relating to—

(i) the construction and operation of the equipment used in qualifying distributed energy systems; and

(ii) the installation of qualifying distributed energy systems; and

(B) that has employed safety training to recognize and avoid the hazards involved in constructing, operating, and installing qualifying distributed energy systems.

(3) **QUALIFYING DISTRIBUTED ENERGY SYSTEM.**—The term “qualifying distributed energy system” means any equipment or materials installed in, on, or near a residential, commercial, or industrial building to support onsite or local energy use, including—

(A) to generate electricity from distributed renewable energy sources, including from—

(i) solar photovoltaic modules or similar solar energy technologies;

(ii) wind power systems; and

(iii) hydrogen electrolysis and fuel cell systems;

(B) to store and discharge electricity from batteries with a capacity of at least 2 kilowatt hours;

(C) to charge a plug-in electric drive vehicle at a power rate of at least 2 kilowatts;

(D) to refuel a fuel cell electric vehicle; or

(E) to generate electricity from fuel cell systems with a capacity of at least 2 kilowatt hours.

(4) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

**SEC. 2302. ESTABLISHMENT OF PROGRAM TO FACILITATE VOLUNTARY STREAMLINED PROCESS FOR LOCAL PERMITTING OF QUALIFYING DISTRIBUTED ENERGY SYSTEMS.**

(a) **IN GENERAL.**—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with trade associations and other entities representing distributed energy system installers and organizations representing State, local, and Tribal governments engaged in permitting,

shall establish and carry out a program to establish a voluntary streamlined permitting process for local permitting and inspection of qualifying distributed energy systems, in concert with relevant national consensus-based codes and specifications and standards referenced therein.

(b) **ACTIVITIES OF THE PROGRAM.**—In carrying out the program established under subsection (a), the Secretary shall—

(1) facilitate the development and maintenance of a streamlined permitting process that includes a national online permitting platform for expediting, standardizing, and streamlining permitting, that authorities having jurisdiction may use to receive, review, and approve permit applications relating to qualifying distributed energy systems;

(2) establish a model expedited permit-to-build protocol for qualifying distributed energy systems;

(3) provide technical assistance to authorities having jurisdiction on using and adopting—

(A) the streamlined permitting process described in paragraph (1); and

(B) the model expedited permit-to-build protocol described in paragraph (2);

(4) develop and maintain a voluntary national inspection protocol integrated with the national online permitting system described in paragraphs (1) and (2) and related tools to expedite, standardize, and streamline the inspection of qualifying distributed energy systems, including—

(A) by investigating the potential for using remote inspections; and

(B) by investigating the potential for sample-based inspection for distributed energy system installers with a demonstrated track record of high-quality work; and

(5) take any other action to expedite, standardize, streamline, or improve the process for permitting, inspecting, or interconnecting qualifying distributed energy systems.

(c) **SUPPORT SERVICES.**—The Secretary shall—

(1) provide technical assistance to authorities having jurisdiction, any administrator of a national online permitting platform, government software providers, and any other entity determined appropriate by the Secretary in carrying out the activities described in subsection (b); and

(2) provide such financial assistance as the Secretary determines appropriate from any funds appropriated to carry out this subtitle.

#### **SEC. 2303. DISTRIBUTED ENERGY OPPORTUNITY COMMUNITIES.**

(a) **IN GENERAL.**—The Secretary shall recognize and certify certain communities as “Distributed Energy Opportunity Communities”.

(b) **QUALIFICATIONS.**—The Secretary may certify a State, local community, or Tribe as a “Distributed Energy Opportunity Community” if that State, local community, or Tribe has adopted and implemented the model expedited permit-to-build protocol established under the program established under section 2302.

(c) **PROCESS.**—The Secretary may confer a certification under subsection (a) through existing programs of the Department of Energy.

(d) **GRANTS.**—The Secretary may award competitive grants, using funds appropriated to the Secretary to carry out this subtitle, to encourage communities to adopt the model expedited permit-to-build protocol and the standardized inspection process established under the program established under section 2302.

#### **SEC. 2304. AUTHORIZATION OF APPROPRIATIONS.**

There is authorized to be appropriated to the Secretary to carry out this subtitle \$20,000,000 for each of fiscal years 2021 through 2025.



44. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LEVIN  
OF MICHIGAN OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 543, line 5, strike “or” at the end.

Page 543, after line 5, insert the following:

(B) a community in which climate change, pollution, or environmental destruction have exacerbated systemic racial, regional, social, environmental, and economic injustices by disproportionately affecting indigenous peoples, communities of color, migrant communities, deindustrialized communities, depopulated rural communities, the poor, low-income workers, women, the elderly, the unhoused, people with disabilities, or youth;  
or

Page 543, line 6, strike “(B)” and insert “(C)”.

Page 544, line 17, strike “equipment.” and insert “equipment, including accessibility in compliance with the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.).”.

Page 546, line 14, strike “and” at the end.

Page 546, after line 14, insert the following:

(v) an identification of any existing electric vehicle supply equipment that—

(I) is available to the public for a minimum of 12 hours per day; and

(II) is not further than 50 miles from the global positioning system location identified under clause (iii); and

Page 546, line 15, strike “(v)” and insert “(vi)”.

Page 561, beginning on line 6, strike “electric vehicles nationwide;” and insert “electric vehicles nationwide, taking into consideration range anxiety and the location of charging infrastructure to ensure an electric vehicle can travel throughout the United States without losing a charge;”.

Page 567, line 23, strike “including commercial vehicles; and” and insert “including commercial vehicles, to an extent that such electric vehicles can travel throughout the State without running out of a charge; and”.

Page 567, line 24, strike “electric grid” and insert “electric grid, including through the use of renewable energy sources to power the electric grid,”.

45. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LEVIN  
OF MICHIGAN OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 830, after line 5, insert the following:

**PART 3—MEASURING GREEN COLLAR JOB DEVELOPMENT**

**SEC. 12121. MEASURING GREEN JOBS.**

(a) **IN GENERAL.**—The Secretary of Labor, in consultation with the Secretary of Energy, and acting through the Bureau of Labor Statistics, where appropriate, shall collect and analyze labor market data to track workforce trends resulting from renewable energy and energy efficiency technology initiatives carried out under this section. Activities carried out under this section shall include the following:

(1) Tracking and documentation of academic and occupational competencies as well as future skill needs with respect to renewable energy and energy efficiency technology.

(2) Tracking and documentation of occupational information and workforce training data with respect to renewable energy and energy efficiency technology.

(3) Collaborating with State agencies, workforce investments boards, industry, organized labor, and community and nonprofit organizations to disseminate information on successful innovations for labor market services and worker training with respect to renewable energy and energy efficiency technology.

(4) Serving as a clearinghouse for best practices in workforce development, job placement and collaborative training partnerships.

(5) Encouraging the establishment of workforce training initiatives with respect to renewable energy and energy efficiency technologies.

(6) Linking research and development in renewable energy and energy efficiency technology with the development of standards and curricula for current and future jobs.

(7) Assessing new employment and work practices including career ladder and upgrade training as well as high performance work systems.

(8) Providing technical assistance and capacity building to national and State energy partnerships, including industry and labor representatives.

(b) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to carry out this section \$10,000,000 for each fiscal years 2021 through 2025.

Page 9, after the matter relating to section 12113, insert the following

**PART 3—MEASURING GREEN COLLAR JOB DEVELOPMENT**

46. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LEVIN OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Redesignate section 12606 as section 12608.

Page 894, after line 6, insert the following new sections:

**SEC. 12606. WILDFIRE SMOKE EMISSIONS MODELING AND FORECASTING IMPROVEMENT PROGRAM.**

(a) **IN GENERAL.**—The Administrator of the National Oceanic and Atmospheric Administration, in collaboration with other Federal agencies and such academic entities as the Administrator considers appropriate, shall maintain a program to improve wildfire smoke emissions modeling and develop smoke forecasts.

(b) **GOAL.**—The goal of the program under subsection (a) shall be to develop and extend accurate wildfire smoke forecasts and impact-based decision support services in order to reduce loss of life, injury, and damage to the economy with a focus on—

(1) improving modeling of wildfire smoke emissions, transport, mixing, and chemical transformations through advanced modeling approaches;

(2) developing and disseminating smoke forecasts; and

(3) incorporating risk communication research in developing smoke forecasts and fire weather warning products.

(c) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Administrator of the National Oceanic and Atmospheric Administration to carry out this section \$20,000,000 for each of fiscal years 2021 through 2025.

**SEC. 12607. EXPOSURE TO WILDFIRE SMOKE AND AIR POLLUTION.**

(a) **IMPACTS OF ACUTE EXPOSURE TO WILDFIRE SMOKE AND COVID-19.**—The Administrator of the Environmental Protection Agency, in coordination with the Director of the Centers for Disease Control and Prevention, and other Federal agencies as appropriate, shall coordinate data collection and epidemiological analysis of the impacts of acute air pollution exposure from wildfires in the context of the COVID-19 pandemic.

(b) **CHRONIC AIR POLLUTION EXPOSURE.**—The Administrator of the Environmental Protection Agency, acting through the Assistant Administrator for Research and Development, shall coordinate with academic institutions and other research organizations to conduct research to estimate the impacts of chronic exposure to air pollutants, and other pertinent variables, in the context of responding to the COVID-19 pandemic.

47. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LIPINSKI OF ILLINOIS OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 9, after the item relating to item section 12606, add the following:

Sec. 12607. Low-Dose-Radiation Research

At the end of subtitle F of title XII, add the following:

**SEC. 12607. LOW-DOSE-RADIATION RESEARCH.**

Section 306(c) of the Department of Energy Research and Innovation Act (42 U.S.C. 18644(c)) is amended to read as follows:

“(c) **LOW-DOSE-RADIATION RESEARCH PROGRAM.**—

“(1) **IN GENERAL.**—The Secretary shall carry out a research program on low-dose and low dose-rate radiation to—

“(A) enhance the scientific understanding of, and reduce uncertainties associated with, the effects of exposure to low-dose and low dose-rate radiation; and

“(B) inform improved risk-assessment and risk-management methods with respect to such radiation.

“(2) **PROGRAM COMPONENTS.**—In carrying out the program required under paragraph (1), the Secretary shall—

“(A) support and carry out the directives under section 106 of the American Innovation and Competitiveness Act (42 U.S.C. 6601 note), with respect to low dose and low-dose rate radiation research, in coordination with the Physical Science Subcommittee of the National Science and Technology Council;

“(B) identify and, to the extent possible, quantify, potential monetary and health-related impacts to Federal agencies, the general public, industry, research communities, and other users of information produced by such research program;

“(C) leverage the collective body of knowledge from prior and existing low-dose and low dose-rate radiation research;

“(D) engage with other Federal agencies, research communities, and potential users of information produced under this section, including institutions performing or utilizing radiation research, medical physics, radiology, health physics, and emergency response measures; and

“(E) support education and outreach activities to disseminate information and promote public understanding of low-dose radiation, with a focus on non-emergency situations such as medical physics, space exploration, and naturally occurring radiation.

“(3) **RESEARCH PLAN.**—

“(A) **NATIONAL ACADEMY OF SCIENCES.**—Not later than 90 days after the date of enactment of this Act, the Secretary shall enter into an agreement with the National Academy of Sciences to develop a long-term strategic and prioritized research agenda for the program described in paragraph (2);

“(B) **CONGRESS.**—Not later than 18 months after the date of enactment of this Act, the Secretary shall submit the research plan developed under subparagraph (A) to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate.

“(4) **PROGRAM EVALUATION.**—

“(A) INDEPENDENT EXTERNAL ENTITY.—Not later than 3 years after the date of enactment of this Act, and every 2 years thereafter, the Secretary shall enter into agreements with an independent external entity to perform a program evaluation.

“(B) CONGRESS.—The Secretary shall submit the program evaluations performed under subparagraph (A) to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate.

“(5) DEFINITIONS.—In this subsection:

“(A) LOW-DOSE RADIATION.—The term ‘low-dose radiation’ means a radiation dose of less than 100 millisieverts.

“(B) LOW DOSE-RATE RADIATION.—The term ‘low dose-rate radiation’ means a radiation dose rate of less than 5 millisieverts per hour.

“(6) RULE OF CONSTRUCTION.—Nothing in this subsection shall be construed to subject any research carried out by the Secretary for the program under this subsection to any limitations described in section 977(e) of the Energy Policy Act of 2005 (42 U.S.C. 16317(e)).

“(7) FUNDING.—There are authorized to be appropriated to the Secretary to carry out the program under this subsection—

“(A) \$20,000,000 for fiscal year 2021;

“(B) \$30,000,000 for fiscal year 2022;

“(C) \$40,000,000 for fiscal year 2023; and

“(D) \$50,000,000 for fiscal year 2024.”.

48. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
LOEBSACK OF IOWA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Add at the end of part 3 of subtitle A of title I the following:

SEC. 1122. GRANTS FOR ENERGY EFFICIENCY IMPROVEMENTS AND  
RENEWABLE ENERGY IMPROVEMENTS AT PUBLIC SCHOOL  
FACILITIES.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE ENTITY.—The term “eligible entity” means a consortium of—

(A) one local educational agency; and

(B) one or more—

(i) schools;

(ii) nonprofit organizations;

(iii) for-profit organizations; or

(iv) community partners that have the knowledge and capacity to partner and assist with energy improvements.

(2) ENERGY IMPROVEMENTS.—The term “energy improvements” means—

(A) any improvement, repair, or renovation, to a school that will result in a direct reduction in school energy costs including but not limited to improvements to building envelope, air conditioning, ventilation, heating system, domestic hot water heating, compressed air systems, distribution systems, lighting, power systems and controls;

(B) any improvement, repair, renovation, or installation that leads to an improvement in teacher and student health including but not limited to indoor air quality, daylighting, ventilation, electrical lighting, and acoustics; and

(C) the installation of renewable energy technologies (such as wind power, photovoltaics, solar thermal systems, geothermal energy, hydrogen-fueled systems, biomass-based systems, biofuels, anaerobic digesters, and hydropower) involved in the improvement, repair, or renovation to a school.

(b) AUTHORITY.—From amounts made available for grants under this section, the Secretary of Energy shall provide competitive grants to eligible entities to make energy improvements authorized by this section.

(c) PRIORITY.—In making grants under this section, the Secretary shall give priority to eligible entities that have renovation, repair, and improvement funding needs and are—

(1) a high-need local educational agency, as defined in section 2102 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6602); or

(2) a local educational agency designated with a metrocentric locale code of 41, 42, or 43, as determined by the National Center for Education Statistics (NCES), in conjunction with the Bureau of the Census, using the NCES system for classifying local educational agencies.

(d) COMPETITIVE CRITERIA.—The competitive criteria used by the Secretary shall include the following:

(1) The fiscal capacity of the eligible entity to meet the needs for improvements of school facilities without assistance under this section, including the ability of the eligible entity to raise funds through the use of local bonding capacity and otherwise.

(2) The likelihood that the local educational agency or eligible entity will maintain, in good condition, any facility whose improvement is assisted.

(3) The potential energy efficiency and safety benefits from the proposed energy improvements.

(e) APPLICATIONS.—To be eligible to receive a grant under this section, an applicant must submit to the Secretary an application that includes each of the following:

(1) A needs assessment of the current condition of the school and facilities that are to receive the energy improvements.

(2) A draft work plan of what the applicant hopes to achieve at the school and a description of the energy improvements to be carried out.

(3) A description of the applicant's capacity to provide services and comprehensive support to make the energy improvements.

(4) An assessment of the applicant's expected needs for operation and maintenance training funds, and a plan for use of those funds, if any.

(5) An assessment of the expected energy efficiency and safety benefits of the energy improvements.

(6) A cost estimate of the proposed energy improvements.

(7) An identification of other resources that are available to carry out the activities for which funds are requested under this section, including the availability of utility programs and public benefit funds.

(f) USE OF GRANT AMOUNTS.—

(1) IN GENERAL.—The recipient of a grant under this section shall use the grant amounts only to make the energy improvements contemplated in the application, subject to the other provisions of this subsection.

(2) OPERATION AND MAINTENANCE TRAINING.—The recipient may use up to 5 percent for operation and maintenance training for energy efficiency and renewable energy improvements (such as maintenance staff and teacher training, education, and preventative maintenance training).

(3) AUDIT.—The recipient may use funds for a third-party investigation and analysis for energy improvements (such as energy audits and existing building commissioning).

(4) CONTINUING EDUCATION.—The recipient may use up to 1 percent of the grant amounts to develop a continuing education curriculum relating to energy improvements.

(g) CONTRACTING REQUIREMENTS.—

(1) DAVIS-BACON.—Any laborer or mechanic employed by any contractor or subcontractor in the performance of work on any energy improvements funded by a grant under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor under subchapter IV of chapter 31 of title 40, United States Code (commonly referred to as the Davis-Bacon Act).

(2) COMPETITION.—Each applicant that receives funds shall ensure that, if the applicant carries out repair or renovation through a contract, any such contract process—

(A) ensures the maximum number of qualified bidders, including small, minority, and women-owned businesses, through full and open competition; and

(B) gives priority to businesses located in, or resources common to, the State or the geographical area in which the project is carried out.

(h) REPORTING.—Each recipient of a grant under this section shall submit to the Secretary, at such time as the Secretary may require, a report describing the use of such funds for energy improvements, the estimated cost savings realized by those energy improvements, the results of any audit, the

use of any utility programs and public benefit funds and the use of performance tracking for energy improvements (such as the Department of Energy: Energy Star program or LEED for Existing Buildings).

(i) BEST PRACTICES.—The Secretary shall develop and publish guidelines and best practices for activities carried out under this section.

(j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$100,000,000 for each of fiscal years 2021 through 2025.



49. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
LOWENTHAL OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 894, after line 15, add the following:

**SEC. 12607. ONLINE PUBLICATION OF GREENHOUSE GAS EMISSIONS.**

(a) **IN GENERAL.**—The Secretary of the Interior shall make freely available on a public website, with respect to the previous year—

(1) information that describes for each fossil fuel operation that is subject to the mineral leasing laws or title III or V of the Federal Land Policy and Management Act of 1976 (30 U.S.C. 1761 et seq.), regardless of size, including production, storage, gathering, processing, transportation, and handling operations—

(A) the aggregate amount of each fossil fuel, by type and by State, produced on Federal leases; and

(B) for gas reported, the portion and source of such amount that was released or disposed of by each of venting, flaring, and fugitive release; and

(2) information that describes the amount and sources of energy, in delivered megawatt hours, produced from operating solar, wind, and geothermal projects on public lands under lease for the production of renewable energy.

(b) **FORMAT.**—Information made available under this section shall be presented in a format that—

(1) translates such amounts and portions into emissions of metric tons of greenhouse gases expressed in carbon dioxide equivalent using both the 20-year and 100-year Global Warming Potential-weighted emission values;

(2) for energy produced from solar, wind, and geothermal projects, includes an estimate of the net emissions that would result from production of the same amount of energy from new fossil fuel-fired facilities; and

(3) can be downloaded in a machine readable format.

(c) **DATA PUBLICATION FREQUENCY.**—The data made available under this section shall be updated at least annually.

50. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LUCAS  
OF OKLAHOMA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of subtitle F of title XII, add the following:

**SEC. 126\_. SENSE OF CONGRESS.**

It is the sense of Congress that in order to reduce emissions and meet 100 percent of the power demand in the United States through clean, renewable, or zero emission energy sources while maintaining United States leadership in science and technology, the Secretary of Energy must prioritize funding for critical fundamental research infrastructure and for basic research and development activities carried out through the Office of Science.

51. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LUCAS  
OF OKLAHOMA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of subtitle F of title XII, add the following:

**SEC. 126\_. SENSE OF CONGRESS.**

It is the sense of Congress that in order to reduce global emissions and meet 100 percent of the power demand in the United States through clean, renewable, or zero emission energy sources while maintaining U.S. competitiveness in science and technology, the United States must prioritize investment in domestic energy sources and supply chains, as well as investment in the research and development of exportable next-generation energy technologies.

52. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LUJÁN OF NEW MEXICO OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

After section 2401 insert the following:

**SEC. 2402. ESTABLISHMENT OF COMMUNITY SOLAR PROGRAMS.**

(a) **IN GENERAL.**—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

“(21) **COMMUNITY SOLAR PROGRAMS.**—Each electric utility shall offer a community solar program that provides all ratepayers, including low-income ratepayers, equitable and demonstrable access to such community solar program. For the purposes of this paragraph, the term ‘community solar program’ means a service provided to any electric consumer that the electric utility serves through which the value of electricity generated by a community solar facility may be used to offset charges billed to the electric consumer by the electric utility. A ‘community solar facility’ is—

“(A) a solar photovoltaic system that allocates electricity to multiple electric consumers of an electric utility;

“(B) connected to a local distribution of the electric utility;

“(C) located either on or off the property of the electric consumers; and

“(D) may be owned by an electric utility, an electric consumer, or a third party.”.

(b) **COMPLIANCE.**—

(1) **TIME LIMITATIONS.**—Section 112(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)) is amended by adding at the end the following:

“(8)(A) Not later than 1 year after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which the State has ratemaking authority) and each nonregulated electric utility shall commence consideration under section 111, or set a hearing date for consideration, with respect to the standard established by paragraph (21) of section 111(d).

“(B) Not later than 2 years after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which the State has ratemaking authority), and each nonregulated electric utility shall complete the consideration and make the determination under section 111 with respect to the standard established by paragraph (21) of section 111(d).”.

(2) **FAILURE TO COMPLY.**—

(A) **IN GENERAL.**—Section 112(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(c)) is amended—

(i) by striking “such paragraph (14)” and all that follows through “paragraphs (16)” and inserting “such paragraph (14). In the case of the standard established by paragraph (15) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph (15). In the case of the standards established by paragraphs (16)”;

(ii) by adding at the end the following: “In the case of the standard established by paragraph (21) of section 111(d), the reference contained in this subsection to the date of enactment

of this Act shall be deemed to be a reference to the date of enactment of that paragraph (21).”.

(B) TECHNICAL CORRECTION.—

(i) IN GENERAL.—Section 1254(b) of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 971) is amended—

(I) by striking paragraph (2); and

(II) by redesignating paragraph (3) as paragraph (2).

(ii) TREATMENT.—The amendment made by paragraph (2) of section 1254(b) of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 971) (as in effect on the day before the date of enactment of this Act) is void, and section 112(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(d)) shall be in effect as if those amendments had not been enacted.

(3) PRIOR STATE ACTIONS.—

(A) IN GENERAL.—Section 112 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622) is amended by adding at the end the following:

“(h) PRIOR STATE ACTIONS.—Subsections (b) and (c) shall not apply to the standard established by paragraph (21) of section 111(d) in the case of any electric utility in a State if, before the date of enactment of this subsection—

“(1) the State has implemented for the electric utility the standard (or a comparable standard);

“(2) the State regulatory authority for the State or the relevant nonregulated electric utility has conducted a proceeding to consider implementation of the standard (or a comparable standard) for the electric utility; or

“(3) the State legislature has voted on the implementation of the standard (or a comparable standard) for the electric utility.”.

(B) CROSS-REFERENCE.—Section 124 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2634) is amended by adding at the end the following: “In the case of the standard established by paragraph (21) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph (21).”.

Page 562, line 3, strike “(21)” and insert “(22)”.

Page 563, line 18, strike “(8)” and insert “(9)”.

Page 563, line 25, strike “(21)” and insert “(22)”.

Page 564, line 8, strike “(21)” and insert “(22)”.

Page 564, line 14, strike “(21)” and insert “(22)”.

Page 564, line 22, strike “(h)” and insert “(i)”.

Page 564, line 24, strike “(21)” and insert “(22)”.

Page 565, line 20, strike “(21)” and insert “(22)”.

Page 565, line 24, strike “(21)” and insert “(22)”.

53. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
MCNERNEY OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 46, after line 3, insert the following:

**PART 4—NATIONAL INSTITUTE OF STANDARDS AND  
TECHNOLOGY**

**SEC. 1122. RESEARCH FOR EFFECTIVENESS AND STANDARDS.**

The Director of the National Institute of Standards and Technology shall

—  
(1) collect data following wildfires in the wildland-urban interface related to the influence of building materials on structural fires and how wind, terrain, and moisture affect wildland fires; and

(2) contribute to the scientific basis for analyzing economic outcomes of wildland-urban interface fire mitigation by conducting research on and developing metrics for the—

(A) relative contribution of moisture, weather, terrain, and infrastructure;

(B) losses and erosion of the forest floor resulting from wildfires in the wildland urban interface; and

(C) the performance of current designs, materials, and technologies used for—

(i) residential structures;

(ii) public and Federal government buildings;

(iii) electric grid infrastructure; and

(iv) other critical infrastructure.

54. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
MUCARSEL-POWELL OF FLORIDA OR HER DESIGNEE,  
DEBATABLE FOR 10 MINUTES

Page 475, after line 13, insert the following:

“(g) UNDERGROUND TRANSMISSION AND DISTRIBUTION LINES.—In carrying out the program under subsection (a), the Secretary shall support research and development on underground transmission and distribution lines. This shall include research on—

“(1) methods for lowering the costs of underground transmission and distribution lines, including through novel installation techniques and materials considerations;

“(2) techniques to improve the lifespan of underground transmission and distribution lines;

“(3) wireless sensors to improve safety of underground transmission and distribution lines and to predict, identify, detect, and transmit information about degradation and faults; and

“(4) methods for improving the resilience and reliability of underground transmission and distribution lines, including by mitigating the impact of flooding, storm surge, and seasonal climate cycles on degradation of and damage to underground transmission and distribution lines.”.

Page 475, line 14, strike “(g)” and insert “(h)”.

Page 476, line 1, strike “(h)” and insert “(i)”.

Page 476, line 4, strike “(i)” and insert “(j)”.

55. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
NORCROSS OF NEW JERSEY OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

At the end of subtitle H of title I, add the following:

SEC. 1806. REBATE PROGRAM FOR ENERGY EFFICIENT  
ELECTROTECHNOLOGIES.

(a) DEFINITIONS.—In this section:

(1) ENERGY EFFICIENT ELECTROTECHNOLOGY.—The term “energy efficient electrotechnology” means—

(A) any electric technology that, when used instead of a fossil fuel-fired technology in an industrial process results in—

- (i) energy efficiency, or production efficiency, gains; or
- (ii) environmental benefits; or

(B) any electric technology that, when used instead of a fossil fuel-fired technology in an industrial application results in—

- (i) improvements in on-site logistics or material handling;
- and
- (ii) energy efficiency gains and environmental benefits.

(2) QUALIFIED ENTITY.—The term “qualified entity” means an industrial or manufacturing facility, commercial building, or a utility or energy service company.

(3) SECRETARY.—The term “Secretary” means the Secretary of Energy.

(b) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish a program to provide rebates in accordance with this section.

(c) REBATES.—The Secretary may provide a rebate under the program established under subsection (b) to the owner or operator of a qualified entity for expenditures made by the owner or operator of the qualified entity for an energy efficient electrotechnology that is used to replace a fossil fuel-fired technology.

(d) REQUIREMENTS.—To be eligible to receive a rebate under this section, the owner or operator of a qualified entity shall submit to the Secretary an application demonstrating—

(1) that the owner or operator of the qualified entity purchased an energy efficient electrotechnology;

(2) the energy efficiency gains, production efficiency gains, and environmental benefits, as applicable, resulting from use of the energy efficient electrotechnology—

(A) as measured by a qualified professional or verified by the energy efficient electrotechnology manufacturer, as applicable; or

(B) as determined by the Secretary;

(3) that the fossil fuel-fired technology replaced by the energy efficient electrotechnology has been permanently decommissioned and scrapped; and

(4) that all laborers and mechanics who were involved in the installation or maintenance, or construction or renovation to support such installation or maintenance, of the energy efficient electrotechnology, or the decommissioning and scrapping of the fossil fuel-fired technology replaced by the energy efficient electrotechnology, and who were employed by the owner or operator of the qualified entity, or contractors or subcontractors at any tier thereof, were paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with



subchapter IV of chapter 31 of title 40, United States Code (commonly referred to as the “Davis-Bacon Act”).

(e) **LIMITATION.**—The Secretary may not provide a rebate under the program established under subsection (b) to an owner or operator of a qualified entity for expenditures made by the owner or operator of the qualified entity for an energy efficient electrotechnology that is used to replace a fossil fuel-fired technology if the Secretary determines that such expenditures were necessary for the owner or operator to comply with Federal or State law.

(f) **AUTHORIZED AMOUNT OF REBATE.**—The amount of a rebate provided under this section shall be not less than 30 percent, and not more than 50 percent, of the overall cost of the energy efficient electrotechnology, including installation costs.

(g) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this section \$100,000,000 for each of fiscal years 2021 through 2025.

56. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
NORCROSS OF NEW JERSEY OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 36, line 5, strike “and” at the end.

Page 36, strike line 13, and insert “(including multifamily buildings);  
and”.

Page 36, after line 13, insert the following:

“(F) to make an addition or alteration to, or to install,  
replace, or provide maintenance to, an air filtration and  
purification system of an HVAC system to meet exigencies  
related to the airborne epidemic transmissions of SARS-  
4CoV-2 or coronavirus disease 2019 (COVID-19).”.

Page 37, line 1, strike “(e)” and insert “(f)”.

Page 36, after line 25, insert the following:

“(e) PREVAILING WAGES.—All laborers and mechanics employed by  
contractors or subcontractors in the performance of construction, alteration,  
or repair work assisted, in whole or in part, by a grant under this section  
shall be paid wages at rates not less than those prevailing on similar  
construction in the locality as determined by the Secretary of Labor in  
accordance with subchapter IV of chapter 31 of title 40. With respect to the  
labor standards in this subsection, the Secretary of Labor shall have the  
authority and functions set forth in Reorganization Plan Numbered 14 of  
1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40.”.

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57. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
OCASIO-CORTEZ OF NEW YORK OR HER DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Strike section 3109.

58. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
O'HALLERAN OF ARIZONA OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

Add at the end of subtitle F of title XII the following:

**SEC. 12607. RURAL AND REMOTE COMMUNITIES ELECTRIFICATION GRANTS.**

(a) IN GENERAL.—Section 609 of the Public Utility Regulatory Policies Act (7 U.S.C. 918c) is amended—

(1) in subsection (a)—

(A) in paragraph (1), by striking “or municipality” and inserting “, municipality, or Indian Tribe”;

(B) in paragraph (5), by striking “10,000” and inserting “20,000”; and

(C) by adding at the end the following:

“(6) The term ‘economically distressed community’ means a unit of local government, an Indian Tribe, or a political subdivision thereof, that is significantly impacted by the closure occurring on or after January 1, 2010, of an electric generating station that primarily consumes coal as a fuel source, including by the loss of—

“(A) employment directly from or associated with the electric generating station, including an associated mine;

“(B) tax revenue, lease payments, or royalties directly from or associated with the electric generating station; or

“(C) access to affordable energy.”;

(2) in subsection (b), by inserting “or economically distressed communities” after “rural areas” each place it appears; and

(3) in subsection (d)—

(A) by striking “\$20,000,000” and inserting “\$50,000,000”; and

(B) by striking “2006 through 2012” and inserting “2021 through 2025”.

59. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
O'HALLERAN OF ARIZONA OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

Add at the end of subtitle F of title XII the following:

**SEC. 12607. COAL COMMUNITY RESOURCE CLEARINGHOUSE.**

(a) **ESTABLISHMENT.**—Not later than 180 days after the date of enactment of this Act, the Secretary of Energy shall publish, maintain, and make publicly available a clearinghouse, to be known as the “Coal Community Resource Clearinghouse”, on the website of the Department of Energy for the purpose of increasing awareness of Federal and State programs, grants, loans, loan guarantees, and other assistance resources the Secretary determines will assist economic development activities in economically distressed communities.

(b) **PERIODIC UPDATES.**—In carrying out subsection (a), the Secretary shall, not less frequently than once per calendar year, update the Coal Community Resource Clearinghouse to address changes to the needs of economically distressed communities.

(c) **ECONOMICALLY DISTRESSED COMMUNITY DEFINED.**—The term “economically distressed community” means a unit of local government, an Indian Tribe, or a political subdivision thereof, that is significantly impacted by the closure occurring on or after January 1, 2010, of an electric generating station that primarily consumes coal as a fuel source, including by the loss of

- 
- (1) employment directly from or associated with the electric generating station, including an associated mine;
  - (2) tax revenue, lease payments, or royalties directly from or associated with the electric generating station; or
  - (3) access to affordable energy.

60. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE OMAR OF MINNESOTA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Add at the end of title XII the following:

**Subtitle G—Zeroing Excess,  
Reducing Organic Waste, And  
Sustaining Technical Expertise**

**SEC. 12701. GRANT PROGRAM.**

(a) **IN GENERAL.**—The Administrator shall establish and carry out a program to award grants, on a competitive basis, to eligible entities for projects that are consistent with zero-waste practices.

(b) **GRANT USE.**—

(1) **ORGANICS RECYCLING INFRASTRUCTURE.**—An eligible entity receiving a grant under this subtitle may use grant funds to carry out a project relating to organics recycling infrastructure, including facilities, machinery, equipment, and other physical necessities required for organics collection or processing on a city-wide or county-wide scale, provided that—

(A) implementation of such project—

(i) results in increased capacity for residential and commercial source separated organics streams; and

(ii) generates a usable product that has demonstrable environmental benefits when compared to the input materials, such as compost with added nutritional content; and

(B) such project does not include mixed-waste composting.

(2) **ELECTRONIC WASTE REUSE AND RECYCLING.**—An eligible entity receiving a grant under this subtitle may use grant funds to carry out a project relating to electronic waste reuse or recycling, including infrastructure and technology, research and development, and product refurbishment, provided that such project—

(A) does not include an electronic waste “buy-back” program that provides compensation for used electronics where such compensation is applied as a credit toward the purchase of additional electronics; and

(B) is carried out by an organization certified in sustainable electronic waste standards by an organization accredited by the National Accreditation Board of the American National Standards Institute & The American Society of Quality, or another accrediting body as determined appropriate by the Administrator.

(3) **SOURCE REDUCTION.**—An eligible entity receiving a grant under this subtitle may use grant funds to carry out a project relating to source reduction, and such project may include—

(A) educational programming and outreach activities to encourage behavioral changes in consumers that result in source reduction; and

(B) product or manufacturing redesign or redevelopment to reduce byproducts, packaging, and other outputs if—

(i) the applicable manufacturer—

(I) is domestically-owned and operated; and

(II) pays a living wage; and

(ii) the redevelopment or redesign does not result in higher toxicity of the product or byproducts, more complicated recyclability of the product or byproducts, or increased volume of byproducts compared with the original practice.

(4) **MARKET DEVELOPMENT.**—An eligible entity receiving a grant under this subtitle may use grant funds to carry out a project relating to market development with respect to source reduction and waste prevention, including by creating demand for sorted recyclable commodities and refurbished goods and promoting domestically-owned and operated manufacturing for projects relating to source reduction or waste prevention, provided that such project—

(A) targets easily or commonly recycled materials which are disproportionately disposed of in landfills or incinerated;

(B) addresses the reduction of the volume, weight, or toxicity of waste and waste byproducts; and

(C) does not conflict with—

(i) minimum-content laws, such as post-consumer recycled content requirements;

(ii) beverage container deposits;

(iii) programs funded through retail fees for specific products or classes of products that use such fees to collect, treat, or recycle such products; or

(iv) any applicable recycled product procurement laws and expanded sustainable government purchasing requirements, as identified by the Administrator.

#### **SEC. 12702. GRANT AWARDS.**

(a) **APPLICATION.**—

(1) **CRITERIA FOR ALL APPLICANTS.**—To be eligible to receive a grant under this subtitle, an eligible entity shall submit to the Administrator an application at such time and in such form as the Administrator requires, demonstrating that the eligible entity—

(A) has set specific source reduction or waste prevention targets;

(B) will carry out such project in communities that are in the 80th percentile or higher for one or more pollutants as noted in the EJSCREEN tool, or any successor system, of the Environmental Protection Agency; and

(C) will carry out a project that meets the applicable project requirements under section 12701(b).

(2) **ADDITIONAL APPLICATION CRITERIA FOR NONPROFIT ORGANIZATION.**—In the case of an application from an eligible entity that is a nonprofit organization, the application shall include a letter of support for the proposed project—

(A) from—

(i) a local unit of government; or—

(ii) a nonprofit organization that—

(I) has a demonstrated history of undertaking work in the geographic region where the proposed project is to take place; and

(II) is not involved in the project being proposed; and

(B) containing such information as the Administrator may require.

(b) **PRIORITY FACTORS.**—

(1) **IN GENERAL.**—In awarding grants under this subtitle, the Administrator shall give priority to eligible entities that—

(A) have statutorily committed to implementing zero-waste practices;

(B) demonstrate how the project to be carried out with grant funds could lead to the creation of new jobs that pay a living wage, with preference for projects that create jobs for individuals with barriers to employment, as determined by the Administrator;

(C) will use grant funds for source reduction or waste prevention in schools;

(D) will use grant funds to employ adaptive management practices to identify, prevent, or address any negative environmental consequences of the proposed project;

(E) have a demonstrated need for additional investment in infrastructure and projects to achieve source reduction and waste prevention targets set by the local unit of government that is responsible for waste and recycling projects in the geographic area;

(F) will use grant funds to develop innovative or new technologies and strategies for source reduction and waste prevention;

(G) demonstrate how receiving the grant will encourage further investment in source reduction and waste prevention projects; or

(H) will incorporate multi-stakeholder involvement, including nonprofit, commercial, and public sector partners, in carrying out a project using grant funds.

(2) **ZERO-WASTE HIERARCHY.**—In determining priority between multiple eligible entities who qualify for priority under paragraph (1), the Administrator shall grant first priority to an eligible entity that can demonstrate how the zero-waste hierarchy was considered with respect to the project to be carried out with grant funds.

**SEC. 12703. REPORTING.**

An eligible entity receiving a grant under this subtitle shall report to the Administrator, at such time and in such form as the Administrator may require, on the results of the project carried out with grant funds and any relevant data requested by the Administrator to track the effectiveness of the program established under section 12701(a).

**SEC. 12704. ANNUAL CONFERENCE.**

In each of calendar years 2022 through 2027, the Administrator shall convene an annual conference for eligible entities, including eligible entities that have received a grant under this subtitle, and other stakeholders as identified by the Administrator, to provide an opportunity for such eligible entities and stakeholders to share experience and expertise in implementing zero-waste practices.

**SEC. 12705. DEFINITIONS.**

In this subtitle:

(1) **ADAPTIVE MANAGEMENT PRACTICES.**—The term “adaptive management practices” means, with respect to a project, the integration of project design, management, and monitoring to identify project impacts and outcomes as they arise and adjust behaviors to improve outcomes.

(2) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(3) **DOMESTICALLY-OWNED AND OPERATED.**—The term “domestically-owned and operated” means, with respect to a business, a business with—

(A) headquarters located within the United States; and

(B) primary operations carried out in the United States.

(4) **ELIGIBLE ENTITY.**—The term “eligible entity” means—

(A) a single unit of State, local, or Tribal government;

(B) a consortium of multiple units of State, local, or Tribal government;

(C) one or more units of State, local, or Tribal government in coordination with for-profit or nonprofit organizations; or

(D) one or more incorporated nonprofit organizations.

(5) **EMBODIED ENERGY.**—The term “embodied energy” means energy that was used to create a product or material.

(6) **LIVING WAGE.**—The term “living wage” means the minimum income necessary to allow a person working 40 hours per week to afford the cost of housing, food, and other material necessities.



(7) **ORGANICS RECYCLING.**—The term “organics recycling” means the biological processes by which organics streams are converted to compost which is not harmful to humans, plants, or animals.

(8) **RECYCLING.**—The term “recycling”—

(A) means the mechanical processing of material that has reached the end of its current use into material to be used in the production of new products;

(B) does not include incineration or any other energy recovery process; and

(C) does not include depolymerization or a similar process.

(9) **REUSE.**—The term “reuse”—

(A) means—

(i) using a product, packaging, or resource more than once for the same or a new function with little to no processing; or

(ii) repairing a product so it can be used longer, sharing or renting it, or selling or donating it to another party; and

(B) does not include incineration.

(10) **SOURCE REDUCTION.**—The term “source reduction”—

(A) includes—

(i) activities that reduce consumption of products or services that create physical outputs, such as packaging, that is secondary to the intended use of the item being consumed;

(ii) measures or techniques that reduce the amount of waste generated during production processes; and

(iii) the reduction or elimination of the use of materials which are not able to be recycled without degrading the quality of the material; and

(B) does not include incineration.

(11) **SOURCE SEPARATED.**—The term “source separated”—

(A) means the separation of a stream of recyclable materials at the point of waste creation before the materials are collected and centralized; and

(B) does not include technologies that sort mixed municipal solid waste into recyclable and non-recyclable materials.

(12) **WASTE PREVENTION.**—The term “waste prevention” includes reuse, recycling, and other methods to reduce the amount of materials disposed of in landfills or incinerated.

(13) **ZERO-WASTE.**—The term “zero-waste” means the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning or otherwise destroying embodied energy, with no discharges to land, water, or air that threaten the environment or human health.

(14) **ZERO-WASTE PRACTICE.**—The term “zero-waste practice” means a practice used to help achieve zero-waste, including source reduction and waste prevention.

**SEC. 12706. AUTHORIZATION OF APPROPRIATIONS.**

There is authorized to be appropriated to the Administrator to carry out this subtitle \$250,000,000 for the period of fiscal years 2021 through 2028.

61. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE OMAR  
OF MINNESOTA OR HER DESIGNEE, DEBATABLE FOR 10  
MINUTES

Add at the end of subtitle F of title XII the following:

**SEC. 12607. REPORT ON FOSSIL FUEL SUBSIDIES.**

The Secretary of the Treasury, in consultation with other relevant departments and agencies, shall submit to Congress a report that contains—

- (1) an identification of any existing fossil fuel production subsidies not eliminated by this Act, or the amendments made by this Act; and
- (2) a quantification of the economic costs of such subsidies.

62. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PANETTA OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 521, after line 10, insert the following:

“(h) CRITICAL INFRASTRUCTURE AND MICROGRID RESEARCH PROGRAM.—The Secretary shall establish a research, development, and demonstration program to improve the energy resilience of critical infrastructure, including through the use of microgrids, during extreme weather events including extreme heat and wildfires. This program shall focus on developing technologies that—

“(1) improve the energy resilience and meet the power needs of critical infrastructure, including through the use of microgrids, renewable energy, energy efficiency, and on-site storage;

“(2) improve the energy efficiency of critical infrastructure;

“(3) decrease the size and cost of on-site backup generators for critical infrastructure;

“(4) provide on-site back-up power with renewable and low-carbon liquid fuels; and

“(5) ensure the safe power up and power down of critical infrastructure when necessary, as well as the transfer to backup sources of power for uninterrupted electricity supply, including the use of microgrids.”.

Page 499, line 20, strike “and”.

Page 499, line 21, insert “, and wildfires” after “disasters”.

63. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PANETTA OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 135, line 3, strike “and”.

Page 135, line 14, strike the period and insert “; and”.

Page 135, after line 14 insert the following new paragraph:

“(6) to enhance or expand the use of materials that are resistant to high heat and fire in dwellings occupied by low-income persons in areas at risk from drought and wildfires.

Page 136, line 12, strike “and”.

Page 136, line 17, insert “and” after the semicolon.

Page 136, after line 17 insert the following new subparagraph:

“(E) implement measures to enhance health and safety through use of materials that are resistant to high heat and fire in areas at risk from drought and wildfires;

64. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE PERLMUTTER OF COLORADO OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 188, beginning on line 11, strike “direct use for heating or cooling” and insert “consumption”.

Page 188, beginning on line 15, strike “grid-enabled water heaters” and insert “grid-enabled water heaters, building heaters or coolers, electric vehicles, mini-pumped hydroelectric facilities, electrolysis processes that make hydrogen for transportation or industrial needs, or any other load shaping mechanism that includes energy storage”.

Page 467, beginning on line 17, strike “direct use for heating or cooling” and insert “consumption”.

Page 467, beginning on line 21, strike “grid-enabled water heaters” and insert “grid-enabled water heaters, building heaters or coolers, electric vehicles, mini-pumped hydroelectric facilities, electrolysis processes that make hydrogen for transportation or industrial needs, or any other load shaping mechanism that includes energy storage”.

65. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PETERS OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of title III, add the following:

**Subtitle D—Interagency Task  
Force On Short-Lived Climate  
Pollutant Mitigation**

**SEC. 3401. INTERAGENCY TASK FORCE ON SHORT-LIVED CLIMATE POLLUTANT  
MITIGATION.**

(a) **ESTABLISHMENT.**—Not later than 90 days after the date of enactment of this Act, the President shall establish a task force, to be known as the Interagency Task Force on Short-Lived Climate Pollutant Mitigation.

(b) **MEMBERSHIP.**—The members of the Task Force shall include the head (or a designee thereof) of each of—

- (1) the Department of Agriculture;
- (2) the Department of Commerce;
- (3) the Department of Defense;
- (4) the Department of Energy;
- (5) the Department of Health and Human Services;
- (6) the Department of the Interior;
- (7) the Department of State;
- (8) the Department of Transportation;
- (9) the Environmental Protection Agency;
- (10) the National Oceanic and Atmospheric Administration;
- (11) the Council on Environmental Quality;
- (12) the United States Agency for International Development; and
- (13) any other Federal agency the President determines

appropriate.

(c) **DUTIES.**—The Task Force shall—

- (1) review the policy recommendations made by—
  - (A) the Intergovernmental Panel on Climate Change;
  - (B) the United States Climate Alliance;
  - (C) the Interagency Strategy to Reduce Methane Emissions;
  - (D) the Council on Climate Preparedness and Resilience; and
  - (E) the Clean Cooking Alliance;
- (2) develop an action plan to reduce short-lived climate pollutants that incorporates any appropriate proposals or recommendations made by the entities referred to in paragraph (1) that are relevant to short-lived climate pollutants;
- (3) identify any Federal program that is, or could be, relevant to reducing short-lived climate pollutants—
  - (A) in the United States; or
  - (B) worldwide;
- (4) identify overlapping and duplicative Federal programs addressing short-lived climate pollutants that would benefit from consolidation and streamlining;
- (5) identify gaps and serious deficiencies in Federal programs targeted at short-lived climate pollutants, including gaps and deficiencies that can be addressed through a combination of assessment, scientific research, monitoring, and technological development activities, with an emphasis on—

(A) industry standards; and

(B) public-private partnerships;

(6) in developing recommendations, consult with affected stakeholders in private industry; and

(7) not later than 18 months after the date of enactment of this Act, submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report describing the findings and recommendations resulting from the activities described in paragraphs (1) through (6).

66. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PETERS OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of title III, add the following:

## **Subtitle D—Black Carbon**

### **SEC. 3401. REDUCTION OF BLACK CARBON EMISSIONS.**

(a) **COMPREHENSIVE PLAN.**—

(1) **IN GENERAL.**—The Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”), in consultation with the Secretary of Energy, the Secretary of State, the Secretary of Transportation, the Secretary of Commerce, and the Commandant of the Coast Guard, shall develop a comprehensive plan to reduce black carbon emissions from ships based on appropriate emissions data from oceangoing vessels. The plan shall provide for such reduction through—

- (A) a clean freight partnership;
- (B) limits on black carbon emissions; and
- (C) efforts that include protection of access to critical fuel shipments and emergency needs of coastal communities.

(2) **ROADMAP.**—A principal objective of the plan developed pursuant to paragraph (1) shall be the establishment, in coordination with the Secretary of State, of a roadmap for helping countries to reduce fine-particle (PM<sub>2.5</sub>) and black carbon emissions in the shipping sector through—

- (A) the installation of advanced emissions controls;
- (B) the reduction of sulfur content in fuels; and
- (C) the adoption of black carbon control policies.

(b) **BLACK CARBON EMISSIONS REDUCTION GOALS.**—The Administrator, in coordination with the Secretary of State, and other relevant Federal agencies, shall—

- (1) lead an effort to reduce black carbon through an Arctic-wide aspirational black carbon goal; and
- (2) encourage observers of the Arctic Council (including India and China) to adopt mitigation plans consistent with the findings and recommendations of the Arctic Council’s Framework for Action on Black Carbon and Methane.

(c) **CLIMATE AND CLEAN AIR COALITION.**—The Administrator, in coordination with the Secretary of State, is encouraged to work with the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants to craft specific financing mechanisms for the incremental cost of international black carbon mitigation activities.

(d) **BLACK CARBON MITIGATION ACTIVITIES.**—

(1) **PRIORITIZATION.**—The Administrator of the United States Agency for International Development, in cooperation with the Administrator, shall—

- (A) encourage black carbon mitigation activities as part of official development assistance and programmatic activities;
- (B) give special emphasis to projects that produce substantial environmental, gender, livelihood, and public health benefits, including support for clean-burning cookstoves and fuels; and
- (C) work with the Global Alliance for Clean Cookstoves to help developing nations establish thriving markets for clean and efficient cooking solutions.



(2) EMISSIONS REDUCTIONS.—The Secretary of State, in collaboration with the Administrator, the Secretary of Energy, and the Secretary of Transportation, shall provide aid to international efforts to reduce black carbon emissions from diesel trucks and ships, 2-stroke engines, diesel generators, and industrial processes by providing technical assistance—

(A) to help developing nations lower the sulfur content of diesel fuels;

(B) to expand access to diesel particulate filters;

(C) to provide vehicle manufacturers with low- and zero-emission engine designs;

(D) to deploy on-road, off-road, and shore-side infrastructure to support zero-emission engine technologies;

(E) to develop other mitigation activities, including energy efficiency alternatives for generators and industrial processes; and

(F) to reduce ammonia emissions from agriculture.

67. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PETERS OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Add after section 12606 the following:

**SEC. 12607. PUBLICATION OF INTERCONNECTIONS SEAMS STUDY.**

Not later than 30 days after the date of the enactment of this Act, the Secretary of Energy shall submit to Congress and make publicly available on the website of the Department a report on the results of the Interconnections Seam Study conducted by the Department.

Page 9, after the matter relating to section 12606, insert the following:

Sec. 12607. Publication of Interconnections Seams Study.

68. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PINGREE OF MAINE OR HER DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 361, line 24, strike “and”.

Page 362, line 2, strike the period and insert a semicolon.

Page 362, after line 2, insert the following:

“(3) the activities described in subsection (a)(4), acting through the Assistant Secretary for Fossil Energy in consultation with the Secretary of Agriculture; and

“(4) the activities described in subsection (a)(5), acting through the Assistant Secretary for Fossil Energy in consultation with the Secretary of Agriculture.”.

69. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PINGREE OF MAINE OR HER DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 243, lines 17 through 22, amend paragraph (3) to read as follows:

(3) To reduce the cost and risk of siting, permitting, construction, operation, maintenance, and decommissioning of wind energy systems, including strategies and technologies to reduce environmental and community impacts, including research and development that reduces impacts on existing ocean uses and increases coordination between offshore wind and existing users, including the commercial fishing industry, improve grid integration, and reduce regulatory barriers.

70. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
PLASKETT OF VIRGIN ISLANDS OR HER DESIGNEE, DEBATABLE  
FOR 10 MINUTES

At the end of title II, add the following subtitle:

## **Subtitle G—Renewable Energy Grant Program**

### **SEC. 2701. RENEWABLE ENERGY GRANT PROGRAM.**

(a) **ESTABLISHMENT.**—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a renewable energy program (in this section referred to as the “program”) under which the Secretary may award grants to covered entities to facilitate projects, in territories of the United States, described in subsection (c).

(b) **APPLICATIONS.**—To be eligible for a grant under the program, a covered entity shall submit to the Secretary an application at such time, in such form, and containing such information as the Secretary may require.

(c) **GRANT USES.**—

(1) **IN GENERAL.**—A covered entity receiving a grant under the program may use grant funds for a project, in territories of the United States—

- (A) to develop or construct a renewable energy system;
- (B) to carry out an activity to increase energy efficiency;
- (C) to develop or construct an energy storage system or device

for—

- (i) a system developed or constructed under subparagraph (A); or
- (ii) an activity carried out under subparagraph (B);
- (D) to develop or construct—
  - (i) a smart grid; or
  - (ii) a microgrid; or

(E) to train residents of territories of the United States to develop, construct, maintain, or operate a renewable energy system.

(2) **LIMITATION.**—A covered entity receiving a grant under the program may not use grant funds to develop or construct a facility that generates electricity using energy derived from—

- (A) fossil fuels; or
- (B) nuclear power.

(d) **TECHNICAL ASSISTANCE.**—The Secretary shall ensure that Department of Energy national laboratories offer to provide technical assistance to each covered entity carrying out a project assisted with a grant under the program.

(e) **REPORT.**—Not later than two years after the establishment of the program, and on an annual basis thereafter, the Secretary shall submit to Congress a report containing—

- (1) an estimate of the amount of funds disbursed under the program;
- (2) an estimate of the energy conservation achieved as a result of the program;
- (3) a description of challenges encountered in implementing projects described in subsection (c)(1); and
- (4) recommendations as to additional legislative measures to increase the use of renewable energy in territories of the United States, as appropriate.

(f) GAO STUDY AND REPORT.—

(1) STUDY AND REPORT.—Not later than 180 days after the date of enactment of this section, the Comptroller General of the United States shall—

(A) conduct a study regarding renewable energy and energy efficiency in territories of the United States; and

(B) submit to Congress a report containing—

(i) the findings of the study; and

(ii) related recommendations.

(2) COMPONENTS.—The study conducted under paragraph (1) shall consider, in relation to territories of the United States, the potential—

(A) to modify existing electric power systems to use renewable energy sources;

(B) to expand the use of microgrids; and

(C) to improve energy resiliency.

(g) DEFINITIONS.—In this section, the following definitions apply:

(1) COVERED ENTITY.—The term “covered entity” means a not-for-profit organization determined eligible by the Secretary for purposes of this section.

(2) DEPARTMENT OF ENERGY NATIONAL LABORATORIES.—The term “Department of Energy national laboratories” has the same meaning as the term “National Laboratory” under section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(3) MICROGRID.—The term “microgrid” means an electric system

(A) that serves the local community with a power generation and distribution system; and

(B) that has the ability—

(i) to disconnect from a traditional electric grid; and

(ii) to operate autonomously when disconnected.

(4) RENEWABLE ENERGY; RENEWABLE ENERGY SYSTEM.—The terms “renewable energy” and “renewable energy system” have the meanings given those terms in section 415(c) of the Energy Conservation and Production Act (42 U.S.C. 6865(c)).

(5) SECRETARY.—The term “Secretary” means the Secretary of Energy.

(6) SMART GRID.—The term “smart grid” means an intelligent electric grid that uses digital communications technology, information systems, and automation to, while maintaining high system reliability—

(A) detect and react to local changes in usage;

(B) improve system operating efficiency; and

(C) reduce spending costs.

(7) TERRITORY.—The term “territory” means the Commonwealth of Puerto Rico, Guam, the United States Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(h) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out this section.

71. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE POCAN  
OF WISCONSIN OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of title XII of the committee print, add the following new  
subtitle:

**Subtitle G—Radon Abatement  
Reauthorization**

**SEC. 12701. TECHNICAL ASSISTANCE TO STATES FOR RADON PROGRAMS  
REAUTHORIZED.**

Section 305(e) of the Toxic Substances Control Act (15 U.S.C. 2665(e)) is amended by striking “1989, 1990, and 1991” and inserting “2021, 2022, and 2023”.

**SEC. 12702. GRANT ASSISTANCE TO STATES FOR RADON PROGRAMS  
REAUTHORIZED.**

Section 306(j) of the Toxic Substances Control Act (15 U.S.C. 2666(j)) is amended by striking “1989, 1990, and 1991” and inserting “2021, 2022, and 2023”.

**SEC. 12703. REGIONAL RADON TRAINING CENTERS REAUTHORIZED.**

Section 308(f) of the Toxic Substances Control Act (15 U.S.C. 2668(f)) is amended by striking “1989, 1990, and 1991” and inserting “2021, 2022, and 2023”.

72. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
QUIGLEY OF ILLINOIS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 894, after line 15, insert the following:

SEC. 12607. USE OF BIRD-SAFE FEATURES, PRACTICES, AND STRATEGIES IN  
PUBLIC BUILDINGS.

(a) IN GENERAL.—Chapter 33 of title 40, United States Code, is amended by adding at the end the following:

**“§3319. Use of bird-safe features, practices, and strategies in public buildings**

“(a) CONSTRUCTION, ALTERATION, AND ACQUISITION OF PUBLIC BUILDINGS.—The Administrator of General Services shall incorporate, to the extent practicable, features, practices, and strategies to reduce bird fatality resulting from collisions with public buildings for each public building—

“(1) constructed;

“(2) acquired; or

“(3) of which more than 50 percent of the facade is substantially altered (in the opinion of the Commissioner of Public Buildings).

“(b) DESIGN GUIDE.—The Administrator shall develop a design guide to carry out subsection (a) that includes the following:

“(1) Features for reducing bird fatality resulting from collisions with public buildings throughout all construction phases, taking into account the number of each such bird fatality that occurs at different types of public buildings.

“(2) Methods and strategies for reducing bird fatality resulting from collisions with public buildings during the operation and maintenance of such buildings, including installing interior, exterior, and site lighting.

“(3) Best practices for reducing bird fatality resulting from collisions with public buildings, including—

“(A) a description of the reasons for adopting such practices; and

“(B) an explanation for the omission of a best practice identified pursuant to subsection (c).

“(c) IDENTIFYING BEST PRACTICES.—To carry out subsection (b)(3), the Administrator may identify best practices for reducing bird fatality resulting from collisions with public buildings, including best practices recommended by—

“(1) Federal agencies with expertise in bird conservation;

“(2) nongovernmental organizations with expertise in bird conservation; and

“(3) representatives of green building certification systems.

“(d) DISSEMINATION OF DESIGN GUIDE.—The Administrator shall disseminate the design guide developed pursuant to subsection (b) to all Federal agencies, subagencies, and departments with independent leasing authority from the Administrator.

“(e) UPDATE TO DESIGN GUIDE.—The Administrator shall, on a regular basis, update the design guide developed pursuant to subsection (b) with respect to the priorities of the Administrator for reducing bird fatality resulting from collisions with public buildings.

“(f) EXEMPT BUILDINGS.—This section shall not apply to—

“(1) any building or site listed, or eligible for listing, on the National Register of Historic Places;

“(2) the White House and the grounds of the White House;



“(3) the Supreme Court building and the grounds of the Supreme Court; or

“(4) the United States Capitol and any building on the grounds of the Capitol.

“(g) CERTIFICATION.—Not later than October 1 of each fiscal year, the Administrator, acting through the Commissioner, shall certify to Congress that the Administrator uses the design guide developed pursuant to subsection (b) for each public building described in subsection (a).

“(h) REPORT.—Not later than October 1 of each fiscal year, the Administrator shall submit to Congress a report that includes—

“(1) the certification under subsection (g); and

“(2) to the extent practicable, the number of each such bird fatality that occurred as a result of a collision with the public buildings occupied by the respective head of each Federal agency.”.

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 33 of title 40, United States Code, is amended by adding at the end the following new item:

“3319. Use of bird-safe features, practices, and strategies in public buildings.”.

73. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
QUIGLEY OF ILLINOIS OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

After the item in the table of contents relating to section 5101, insert the following:

Sec. 5102. Definitions.

Sec. 5103. Power system modeling reform and updates to grid services and grid operator software.

Sec. 5104. Advanced energy and grid efficiency studies and report.

Page 436, after line 15, insert the following:

**SEC. 5102. DEFINITIONS.**

In sections 5103 and 5104:

(1) **ADVANCED ENERGY TECHNOLOGY.**—The term “advanced energy technology” means any energy generation, load-modifying transmission, or storage technology with zero or minimal greenhouse gas emissions that is connected—

- (A) to the distribution system;
- (B) to the transmission system; or
- (C) behind the meter.

(2) **ADVISORY COMMITTEE.**—The term “Advisory Committee” means the advisory committee established under section 5103(a)(2)(A).

(3) **COMMISSION.**—The term “Commission” means the Federal Energy Regulatory Commission.

(4) **ELECTRIC UTILITY.**—The term “electric utility” has the meaning given the term in section 3 of the Federal Power Act (16 U.S.C. 796).

(5) **GRID OPERATOR.**—The term “grid operator” means—

- (A) a Transmission Organization, including—
  - (i) an Independent System Operator; and
  - (ii) a Regional Transmission Organization;
- (B) a public utility; and
- (C) an electric utility.

(6) **INDEPENDENT SYSTEM OPERATOR.**—The term “Independent System Operator” has the meaning given the term in section 3 of the Federal Power Act (16 U.S.C. 796).

(7) **INITIATIVE.**—The term “Initiative” means the Advanced Energy Technology Research Initiative established under section 5103(a)(1).

(8) **PUBLIC UTILITY.**—The term “public utility” has the meaning given the term in section 201(e) of the Federal Power Act (16 U.S.C. 824(e)).

(9) **REGIONAL TRANSMISSION ORGANIZATION.**—The term “Regional Transmission Organization” has the meaning given the term in section 3 of the Federal Power Act (16 U.S.C. 796).

(10) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

(11) **TRANSMISSION ORGANIZATION.**—The term “Transmission Organization” has the meaning given the term in section 3 of the Federal Power Act (16 U.S.C. 796).

**SEC. 5103. POWER SYSTEM MODELING REFORM AND UPDATES TO GRID SERVICES AND GRID OPERATOR SOFTWARE.**

(a) **ADVANCED ENERGY TECHNOLOGY RESEARCH INITIATIVE.**—

(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Commission, in coordination with the Secretary, shall establish an initiative, to be known as the “Advanced Energy Technology Research Initiative”, to research and provide recommendations on how to improve the modeling, operational, and planning practices used for the bulk electric system.

(2) ADVISORY COMMITTEE.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Commission, in coordination with the Secretary, shall establish an advisory committee to research, report on, and provide recommendations on matters relating to the Initiative, including—

(i) whether the existing modeling and long-term and short-term planning practices used by grid operators for power systems, including power markets, adequately incorporate expected integration with respect to advanced energy technologies;

(ii) whether the methods used to determine future transmission and capacity needs and make reliability-related determinations use the right data to adequately forecast and model the integration of advanced energy technology into electric power systems;

(iii) whether the modeling and planning practices described in clause (i) and the methods described in clause (ii) need to be updated to better account for the integration of advanced energy technology into electric power systems;

(iv) any undue barriers to the adoption of advanced energy technology presented by—

(I) existing modeling, operational, and planning practices; and

(II) State estimation tools for planning and reliability;

(v) any need to develop emerging technologies or software for use in improving modeling, planning, and operations in wholesale electricity markets to resolve computational or technical barriers to the adoption of advanced energy technology, including software relating to—

(I) the use of big data, artificial intelligence, and probabilistic methods to predict, in near-real-time—

(aa) energy generation from variable and distributed resources;

(bb) load profiles; and

(cc) consumption and congestion; and

(II) the use of artificial intelligence to improve the responsiveness of energy system operations;

(vi) whether existing and future grid reliability service definitions and the modeling techniques, operational processes, and planning processes used to procure grid reliability services

(I) appropriately account for the technical and operational characteristics of advanced energy technologies;

(II) allow for the use of those advanced energy technologies to provide grid reliability services; and

(III) include appropriate cybersecurity safeguards; and

(vii) any rulemaking, technical conference, or policy statement that, in the determination of the Advisory Committee, the Commission should consider.

(B) COMPOSITION.—The Advisory Committee shall consist of

(i) not fewer than 1 representative from each of—

(I) the Commission;

- (II) the Department of Energy;
- (III) the Electric Reliability Organization (as defined in section 215(a) of the Federal Power Act (16 U.S.C. 824o(a)));
- (IV) an Independent System Operator or a Regional Transmission Organization;
- (V) an entity generating electric power that is not affiliated with a transmission-owning public or nonpublic utility;
- (VI) an environmental organization with expertise on the bulk electric system; and
- (VII) an institution of higher education with expertise on the bulk electric system;
- (ii) not fewer than 2 designees of the National Association of Regulatory Utility Commissioners;
- (iii) not fewer than 3 representatives from public utilities or electric utilities in areas not serviced by an Independent System Operator or a Regional Transmission Organization; and
- (iv) not fewer than 2 representatives from private and nonprofit associations with expertise in the development, deployment, and use of advanced energy technologies.

(C) REPORTS.—Not later than 18 months after the date of enactment of this Act, and every 2 years thereafter for 10 years, the Advisory Committee shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the Initiative, including the findings or recommendations of the Advisory Committee with respect to the matters described in clauses (i) through (vii) of subparagraph (A).

(b) ADVANCED ENERGY TECHNOLOGY AND GRID SERVICES PROGRAM.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a competitive financial assistance program, to be known as the “Advanced Energy Technology and Grid Services Program”, under which the Secretary shall enter into Federal financial assistance agreements with eligible entities described in paragraph (2) for the purpose of increasing the market penetration of advanced energy technology through advanced research and development and pilot demonstrations of—

- (A) software upgrades, including upgrades to the software platforms used to operate wholesale energy markets;
- (B) updated power system planning;
- (C) new power system (including power market) modeling platforms;
- (D) cybersecurity and physical security upgrades; and
- (E) resilience upgrades.

(2) ELIGIBLE ENTITIES DESCRIBED.—An eligible entity referred to in paragraph (1) is—

- (A) a grid operator;
- (B) a State public utility commission;
- (C) an energy cooperative;
- (D) a municipality;
- (E) an electric utility;
- (F) a gas utility; or
- (G) a State energy office.

(3) ELIGIBLE ACTIVITIES.—The Secretary may enter into a financial assistance agreement under this subsection for—

- (A) software upgrades by grid operators;
- (B) new power system (including power market) modeling platforms;
- (C) enhancements to cybersecurity safeguards; or

(D) updated power system (including power market) planning, updated power system (including power market) modeling, or updated reliability planning and modeling by grid operators.

(4) **COST SHARING.**—In awarding Federal financial assistance (including grants, loans, and any other form of financial assistance) to fund eligible activities under this subsection, the Secretary shall require cost sharing in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

(5) **COORDINATION.**—In carrying out the Advanced Energy Technology and Grid Services Program established under this subsection, the Secretary, to the maximum extent practicable, shall coordinate with existing programs of the Department of Energy that focus on grid modernization efforts.

**SEC. 5104. ADVANCED ENERGY AND GRID EFFICIENCY STUDIES AND REPORT.**

(a) **STUDIES.**—

(1) **ADVANCED ENERGY STUDY.**—The Secretary, in coordination with the Commission, shall carry out a study of the costs and benefits to consumers of updating power system planning, modeling, and operational practices, including reliability-related planning, and energy market participation rules on advanced energy technologies and resources, including distributed energy technologies and resources, such as—

- (A) energy storage technologies;
- (B) energy efficiency and transmission efficiency technologies;
- (C) distributed solar and wind energy generation;
- (D) fuel cells;
- (E) smart thermostats and smart building technologies;
- (F) demand response technologies, including natural gas demand response technologies;
- (G) advanced metering technologies;
- (H) electric vehicles and electric vehicle charging infrastructure;
- (I) any aggregation of the distributed energy technologies and resources described in subparagraph (A) or (C); and
- (J) any other advanced energy technologies, as determined by the Secretary.

(2) **GRID EFFICIENCY STUDY.**—

(A) **IN GENERAL.**—The Secretary, in coordination with the Commission, shall carry out a study of the barriers and opportunities for advanced energy technologies that provide increased, more efficient, or more effective delivery over the existing transmission network.

(B) **REQUIREMENTS.**—The study under subparagraph (A) shall include—

- (i) an examination of—
  - (I) the reliability, resilience, and economic benefits of technologies such as power flow control, topology optimization, and dynamic line ratings;
  - (II) the costs, benefits, and challenges associated with deployment of the advanced energy technologies described in subparagraph (A); and
  - (III) the impact of grid efficiency improvements on wholesale and retail electricity rates; and
- (ii) an analysis of the role of financial and regulatory incentives in the deployment of advanced energy technologies, as determined by the Secretary.

(b) **REPORT.**—Not later than 18 months after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report describing the results of the studies under paragraphs (1) and (2) of subsection (a).



74. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE ROUDA OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Add at the end of subtitle H of title I the following:

**SEC. 1806.REMOVING BARRIERS TO EFFICIENCY.**

(a) **IN GENERAL.**—Section 327 of the Energy Policy and Conservation Act (42 U.S.C. 6297) is amended by adding at the end the following:

“(h) **SUSPENSION OF PREEMPTION.**—This section shall not apply to a covered product during any period that—

“(1) begins on the date that is 8 years after the date on which the energy conservation standard was established under section 325 for the covered product; and

“(2) ends on the effective date of an energy conservation standard established after the date described in paragraph (1) under section 325 for the covered product, that is equivalent to, or more stringent than, the standard described in such paragraph.

“(i) **NO PREEMPTION ABSENT A FEDERAL STANDARD.**—

“(1) **APPLICATION.**—Notwithstanding any other provision of this part, this section does not apply to any State regulation insofar as the State regulation applies to any product not subject to an energy conservation standard established under section 325.

“(2) **COMPLIANCE PERIOD.**—Any State regulation prescribed or enacted for a covered product before the date on which an energy conservation standard is established under section 325 for the covered product shall not be preempted until the effective date of an equivalent or more stringent energy conservation standard under section 325 for the covered product.”.

(b) **ASHRAE PRODUCTS.**—Section 345(b)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6316(b)(2)) is amended by adding at the end the following:

“(E) Notwithstanding subparagraph (A), a standard prescribed or established under section 342(a) shall not supersede any State or local regulation concerning the energy efficiency or energy use of a product for which a standard is prescribed or established pursuant to such section during any period that—

“(i) begins on the date that is 8 years after the date on which such standard was prescribed or established; and

“(ii) ends on the effective date of a standard prescribed or established after the date described in clause (i) under section 342(a) for the product, that is equivalent to, or more stringent than, the standard described in such clause.”.

75. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE RUSH OF ILLINOIS OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

At the end of part 2 of subtitle A of title XII, add the following new section:

**SEC. 12114. ENERGY JOBS COUNCIL AND ANNUAL ENERGY EMPLOYMENT REPORT.**

(a) **ENERGY JOBS COUNCIL.**—

(1) **ESTABLISHMENT.**—Not later than 90 days after the date of enactment of this Act, the Secretary of Energy (referred to in this section as the “Secretary”) shall establish a council, to be known as the “Energy Jobs Council” (referred to in this section as the “Council”).

(2) **MEMBERSHIP.**—The Council shall be comprised of—

(A) to be appointed by the Secretary—

(i) one or more representatives of the Energy Information Administration; and

(ii) one or more representatives of a State energy office that are serving as members of the State Energy Advisory Board established by section 365(g) of the Energy Policy and Conservation Act (42 U.S.C. 6325(g));

(B) to be appointed by the Secretary of Commerce—

(i) one or more representatives of the Department of Commerce; and

(ii) one or more representatives of the Bureau of the Census;

(C) one or more representatives of the Bureau of Labor Statistics, to be appointed by the Secretary of Labor; and

(D) one or more representatives of any other Federal agency the assistance of which is required to carry out this Act, as determined by the Secretary, to be appointed by the head of the applicable agency.

(b) **SURVEY AND ANALYSIS.**—

(1) **IN GENERAL.**—The Council shall—

(A) conduct a survey of employers in the energy, energy efficiency, renewable energy, and motor vehicle sectors of the economy of the United States; and

(B) perform an analysis of the employment figures and demographics in those sectors, including the number of personnel in each sector who devote a substantial portion of working hours, as determined by the Secretary, to compliance matters.

(2) **METHODOLOGY.**—In conducting the survey and analysis under paragraph (1), the Council shall employ a methodology that—

(A) was approved in 2016 by the Office of Management and Budget for use in the document entitled “OMB Control Number 1910–5179”;

(B) uses a representative, stratified sampling of businesses in the United States; and

(C) is designed to elicit a comparable number of responses from businesses in each State and with the same North American Industry Classification System codes as were received for the 2016 and 2017 reports entitled “U.S. Energy and Employment Report”.

(3) **CONSULTATION.**—In conducting the survey and analysis under paragraph (1), the Council shall consult with key stakeholders, including—



(A) as the Council determines to be appropriate, the heads of relevant Federal agencies and offices, including—

- (i) the Secretary of Commerce;
- (ii) the Secretary of Transportation;
- (iii) the Director of the Bureau of the Census;
- (iv) the Commissioner of the Bureau of Labor Statistics;

and

(v) the Administrator of the Environmental Protection Agency;

(B) States;

(C) the State Energy Advisory Board established by section 365(g) of the Energy Policy and Conservation Act (42 U.S.C. 6325(g)); and

(D) energy industry trade associations.

(c) REPORT.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Secretary shall—

(A) make publicly available on the website of the Department of Energy a report, to be entitled the “U.S. Energy and Employment Report”, describing the employment figures and demographics in the energy, energy efficiency, and motor vehicle sectors of the United States based on the survey and analysis conducted under subsection (b); and

(B) subject to the requirements of the Confidential Information Protection and Statistical Efficiency Act of 2002 (44 U.S.C. 3501 note; Public Law 107–347), make the data collected by the Council publicly available on the website of the Department of Energy.

(2) CONTENTS.—

(A) IN GENERAL.—The report under paragraph (1) shall include employment figures and demographic data for—

(i) the energy sector of the economy of the United States, including—

- (I) the electric power generation and fuels sector; and
- (II) the transmission, storage, and distribution sector;

(ii) the energy efficiency sector of the economy of the United States; and

(iii) the motor vehicle sector of the economy of the United States.

(B) INCLUSION.—With respect to each sector described in subparagraph (A), the report under paragraph (1) shall include employment figures and demographic data sorted by—

(i) each technology, subtechnology, and fuel type of those sectors; and

(ii) subject to the requirements of the Confidential Information Protection and Statistical Efficiency Act of 2002 (44 U.S.C. 3501 note; Public Law 107–347)—

- (I) each State;
- (II) each territory of the United States;
- (III) the District of Columbia; and
- (IV) each county (or equivalent jurisdiction) in the United States.

76. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
SCHRADER OF OREGON OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

At the end of subtitle H of title I, add the following:

**SEC. 1806. HOME WILDFIRE RISK REDUCTION REBATE PROGRAM.**

(a) **IN GENERAL.**—The Secretary of Energy shall establish a program, to be known as the “Home Wildfire Risk Reduction Rebate Program”, to provide rebates to homeowners to defray the costs of retrofitting an existing home to be wildfire-resistant.

(b) **AMOUNT OF REBATE.**—In carrying out the Home Wildfire Risk Reduction Rebate Program, the Secretary shall provide a homeowner a rebate of up to—

(1) \$10,000 for the retrofitting of roof features, including the roof covering, vents, soffit and fascia, and gutters, to be wildfire-resistant;

(2) \$20,000 for the retrofitting of exterior wall features, including sheathing and siding, doors, and windows, to be wildfire-resistant;

(3) \$5,000 for the retrofitting of a deck, including the decking, framing, and fascia, to be wildfire-resistant; and

(4) \$1,500 for the retrofitting of near-home landscaping, including mulch and landscape fabric in a 5-foot zone immediately around the home and under all attached decks, to be wildfire-resistant.

(c) **INCLUSION.**—For purposes of this section, the cost of a retrofit shall include all costs associated with the retrofit, including the purchase and installation of wildfire-resistant products and components.

(d) **LIMITATION.**—The amount of the rebate under this section shall not exceed 50 percent of the cost of the retrofit.

(e) **PROCESS.**—

(1) **FORMS; REBATE PROCESSING SYSTEM.**—Not later than 90 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of the Treasury, shall—

(A) develop and make available rebate forms required to receive a rebate under this section;

(B) establish a Federal rebate processing system which shall serve as a database and information technology system that will allow homeowners to submit required rebate forms; and

(C) establish a website that provides information on rebates provided under this section, including how to determine whether particular measures qualify for a rebate under this section and how to receive such a rebate.

(2) **SUBMISSION OF FORMS.**—In order to receive a rebate under this section, a homeowner shall submit the required rebate forms, and any other information the Secretary determines appropriate, to the Federal rebate processing system established under paragraph (1).

(f) **MODERATE-INCOME HOUSEHOLDS.**—

(1) **CERTIFICATIONS.**—The Secretary shall establish procedures for certifying that the household of a homeowner is moderate-income for purposes of this section.

(2) **LIMITATION FOR MODERATE INCOME HOUSEHOLDS.**—Notwithstanding subsection (d), for households of homeowners that are certified pursuant to the procedures established under paragraph (1) as moderate-income, the amount of the rebate under this section shall not exceed 80 percent of the cost of the retrofit.

(3) **OUTREACH.**—The Secretary shall establish procedures to—

(A) provide information to households of homeowners that are certified pursuant to the procedures established under paragraph (1) as moderate-income regarding other programs and resources relating to assistance for upgrades of homes, including the weatherization assistance program implemented under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.); and

(B) refer such households, as applicable, to such other programs and resources.

(g) DEFINITION.—In this section, the term “wildfire-resistant” means meeting or exceeding the specifications of the International Code Council’s 2018 International Wildland-Urban Interface Code (IWUIC).

(h) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$500,000,000 for each of fiscal years 2021 through 2025.

77. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
SCHWEIKERT OF ARIZONA OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

At the end of subtitle A of title III, add the following:

**SEC. 3115. STUDY ON BLUE HYDROGEN TECHNOLOGY.**

(a) **STUDY.**—The Secretary of Energy shall conduct a study to examine opportunities for research and development in integrating blue hydrogen technology in the industrial power sector and how that could enhance the deployment and adoption of carbon capture and storage.

(b) **REPORT.**—Not later than 1 year after the date of enactment of this Act, the Secretary of Energy shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that describes the results of the study under subsection (a).

78. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE SCOTT  
OF VIRGINIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 247, line 23, redesignate paragraph (11) as paragraph (12).

Page 247, line 23, insert the following:

(11) Modeling and simulation tools to more efficiently design, site, permit, manufacture, construct, operate, maintain, and decommission wind energy systems.

79. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE SCOTT OF VIRGINIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 242, after line 13, insert the following:

(2) The term “energy critical material” means any of a class of non-fuel materials that have a high risk of a supply disruption and are critical to one or more existing or new, energy-related technologies such that a substantial supply disruption of such material would significantly inhibit large-scale deployment of technologies that produce, transmit, store, or conserve energy.

Page 242, lines 14, 18, and 21, redesignate paragraphs (2), (3), and (4), as paragraphs (3), (4), and (5), respectively.

Page 246, line 7, strike the semicolon at the end

Page 246, line 8, strike the period at the end and insert “; and”.

Page 246, after line 8, insert the following:

(H) materials and designs that reduce the need for and use of energy critical materials.

Page 247, line 4, subparagraph (4) is amended to read as follows:

(4) Recycling and reuse of wind energy components, with special consideration for the recovery and reuse of energy critical materials, in coordination with the program under Title X of the Clean Economy Jobs and Innovation Act.

80. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
SHERRILL OF NEW JERSEY OR HER DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 252, line 3, insert “(including for air traffic control, air defense, and weather detection)” after “radar systems”.

81. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE STEVENS OF MICHIGAN OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 593, after line 17, insert the following:

## **Subtitle G—Research And Development**

**SEC. 6701. DEFINITIONS.**

In this subtitle:

(1) **ALTERNATIVE FUEL.**—The term “alternative fuel” means a fuel that is sustainably produced and, or, that results in a significant reduction in carbon dioxide (CO<sub>2</sub>) emissions, or other particulate or toxic emissions, over the lifecycle of such fuel.

(2) **DEPARTMENT.**—The term “Department” means the Department of Energy.

(3) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

**SEC. 6702. VEHICLE RESEARCH AND DEVELOPMENT.**

(a) **IN GENERAL.**—The Secretary shall conduct a program of research, development, and demonstration activities on more efficient and sustainable materials, technologies, and processes with the potential to substantially reduce or eliminate petroleum from the manufacture, use, and the emissions of the passenger and commercial vehicles with lower cost of vehicle manufacturing and ownership, including activities in the areas of—

(1) electrification of vehicle systems; including compact and efficient electric drivetrain systems;

(2) power electronics, electric machines, and electric machine drive systems, including—

(A) electronic motors, including advanced inverters and motors that can be used for passenger vehicles and commercial vehicles;

(B) magnetic materials, including permanent magnets with reduced or no critical materials;

(C) improving partial load efficiency;

(D) design of power electronics and electric motor technologies that enable efficient recycling of critical materials; and

(E) other technically feasible areas for power electronics and electric machine advances.

(3) vehicle batteries and relevant systems, including—

(A) advanced batteries systems, ultracapacitors, and other competitive energy storage devices;

(B) the development of common interconnection protocols, specifications, and architecture for both transportation and stationary battery applications;

(C) improving energy density and capacity, recharging robustness, extreme fast charging and wireless charging capabilities, and efficiencies to lower cost;

(D) thermal management of battery systems;

(E) improving efficient use, substitution, and recycling of potentially critical materials in vehicles, including rare earth elements and precious metals, at risk of supply disruption; and

(F) advanced battery protection systems for safe handling of high voltage power;



- (4) vehicle, component, and subsystem manufacturing technologies and processes;
- (5) vehicle systems and components, including—
  - (A) engine efficiency and combustion optimization;
  - (B) waste heat recovery;
  - (C) transmission and drivetrains;
  - (D) advanced boosting systems;
  - (E) idle reduction systems and components;
  - (F) innovative propulsion systems; and
  - (G) vehicle fuel cells and relevant systems;
- (6) hybrid and alternative fuel vehicles, including—
  - (A) vehicle fuel cells and relevant systems, including power electronics systems to regulate the fuel cell voltages;
  - (B) synthetic fuels from recycled CO<sub>2</sub> and net-zero carbon liquid fuels; and
  - (C) advanced biofuel technologies;
- (7) aftertreatment technologies, aerodynamics, rolling resistance (including tires and wheel assemblies), accessory power loads of vehicles and associated equipment, friction and wear reduction, and lubricants for hybrid and electric vehicles;
- (8) vehicle weight reduction, including—
  - (A) more sustainable and cost-effective lightweighting materials; and
  - (B) the development of higher efficiency manufacturing processes to make sustainable lightweight materials and fabricate, assemble, and use dissimilar materials, including—
    - (i) lightweighted systems which combine several existing vehicle components; and
    - (ii) voluntary, consensus-based standards for strategic lightweight materials;
- (9) improved vehicle recycling methods to increase the recycled material content of feedstocks used in raw material manufacturing;
- (10) vehicle propulsion systems, including—
  - (A) engine and component durability;
  - (B) engine down speeding;
  - (C) engine compatibility with and optimization for a variety of transportation fuels, including biofuels, synthetic fuels, and other liquid and gaseous fuels;
  - (D) advanced internal combustion engines;
  - (E) transmission gear and engine operation matching; and
  - (F) advanced transmission technologies;
- (11) predictive engineering, modeling, and simulation of components, vehicle and transportation systems;
- (12) leveraging automation in both vehicle and infrastructure systems;
- (13) infrastructure, including—
  - (A) refueling and charging infrastructure for alternative fueled and electric drive or plug-in electric hybrid vehicles, including the unique challenges facing rural areas;
  - (B) extreme fast wired and wireless charging systems;
  - (C) integration, bidirectional capability, and operational optimization of vehicle electrification for light, medium, and heavy duty with the charging infrastructure and the grid; and
  - (D) sensing, communications, and actuation technologies for vehicle, electric grid, and infrastructure, including—
    - (i) communication and connectivity among vehicles, infrastructure, and the electrical grid; and
    - (ii) vehicle-to-vehicle, vehicle-to-pedestrian, vehicle-to-cloud, and vehicle-to-infrastructure technologies;
- (14) retrofitting advanced vehicle technologies to existing vehicles;

(15) transportation system analysis to further understand the energy implications and opportunities of advanced mobility solutions, including—

(A) advanced vehicle technologies, including automation;

(B) new mobility business models, real time information, transit, and micro mobility choices;

(C) consumer travel decisions and e-commerce engagement, including travel behavior and potential strategies for reducing vehicle miles traveled to reduce emissions;

(D) goods movement and delivery interactions, including with car transport;

(E) infrastructure advancements and linkage with vehicle-to-everything,

(F) quantification of technology, policy, and investment decisions on mobility, access, equity, and the environment; and

(G) overall system optimization;

(16) aligned industry standards for strategic lightweight materials;

(17) energy efficient advanced computing systems, technology, and networking for vehicular on-board, off-board, and edge computing applications;

(18) identifying strategies to mitigate the long-term ramification of vehicle and mobility technology research, development, and demonstration stemming from events such as economic downturns; and

(19) other innovative technologies research and development as determined by the Secretary.

(b) SECURITY OF ON-ROAD TRANSPORTATION.—

(1) IN GENERAL.—The Secretary, in coordination with other relevant Federal agencies, shall establish a research and development program focused on the cyber and physical security of interconnections between vehicles, charging equipment, buildings, and the grid for plug-in electric vehicles, connected vehicles, and autonomous vehicles, including the security impacts, efficiency, and safety of plug-in electric vehicles using alternating current charging, high-power direct current fast charging, and extreme fast charging, defined as charge rates of 350kW and above.

(2) ASSESSMENT.—The Secretary shall develop an assessment of emergent cybersecurity threats and vulnerabilities to the United States on-road transportation system and connected infrastructure with 5- to 10-year impact by identifying areas of research where Federal cross-agency research coordination and cooperation will help address such threats and vulnerabilities.

(3) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Energy and Natural Resources of the Senate a report summarizing the current research and challenges associated with cyber-physical protection and resiliency of electric and connected and automated vehicle technologies.

(c) VEHICLE ENERGY STORAGE SYSTEM SAFETY.—

(1) IN GENERAL.—The Secretary shall support a program of research, development, and demonstration of vehicle energy storage safety and reliability.

(2) ACTIVITIES.—In carrying out this section, the Secretary shall support activities to—

(A) research the mechanisms that lead to vehicle energy storage system safety and reliability incidents;

(B) develop new materials to improve overall vehicle energy storage system safety and abuse tolerance;

(C) perform abuse testing;

(D) advance testing techniques;

- (E) demonstrate detailed failure analyses;
- (F) develop strategies to mitigate vehicle energy storage cell and system failures; and
- (G) development of crush-induced battery safety protocols and standards to improve robustness.

(d) VEHICLE TECHNOLOGIES ADVISORY COMMITTEE.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish the Advanced Vehicle Technologies Advisory Committee (in this section referred to as the “advisory committee”) to advise the Secretary on vehicle technology and mobility system research advancements. The advisory committee shall be composed of not fewer than 15 members, including representatives of research and academic institutions, environmental organizations, industry, and nongovernmental entities, who are qualified to provide advice on the research, development, and demonstration activities under this Act (in this section referred to as the DOE Vehicle Program).

(2) ASSESSMENT.—The advisory committee shall assess—

(A) the current state of United States competitiveness in advancing vehicle technologies and mobility systems, including—

(i) the scope and scale of United States investments in sustainable transportation research, development, demonstration, and

(ii) research, development, and demonstration activities to lower vehicle and fuel lifecycle emissions;

(B) progress made in implementing the DOE Vehicle Program, including progress of research activities to lower vehicle emissions, considering emissions at each stage of the vehicle and fuel lifecycle;

(C) the need to revise the DOE Vehicle Program;

(D) the balance of activities and funding across the DOE Vehicle Program;

(E) the management, coordination, implementation, and activities of the DOE Vehicle Program;

(F) whether environmental, safety, security, and other appropriate societal issues are adequately addressed by the DOE Vehicle Technologies Program; and

(G) other relevant topics as decided by the Secretary.

(3) REPORTS.—Not later than 2 years after the date of enactment of this Act, and not less frequently than once every 3 years thereafter, the advisory committee shall submit to the Secretary, the Committee on Science, Space, and Technology of the House of Representatives a report on—

(A) the findings of the advisory committee’s assessment under paragraph (1); and

(B) the advisory committee’s recommendations for ways to improve the DOE Vehicle Program.

(4) APPLICATION OF FEDERAL ADVISORY COMMITTEE ACT.

—Section 14 of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Advisory Committee.

(e) INTERAGENCY AND INTRAAGENCY COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate research, development, and demonstration activities among—

(1) relevant programs within the Department, including—

(A) the Office of Energy Efficiency and Renewable Energy;

(B) the Office of Science;

(C) the Office of Electricity;

(D) the Office of Fossil Energy;

(E) the Office of Cybersecurity, Energy Security, and Emergency Response;

(F) the Advanced Research Projects Agency—Energy; and

(G) other offices as determined by the Secretary; and

(2) relevant technology research and development programs within other Federal agencies, including—

- (A) the Department of Transportation;
- (B) National Institute of Standards & Technology;
- (C) National Science Foundation; and
- (D) other Federal agencies as determined by the Secretary.

(f) INTERGOVERNMENTAL COORDINATION.—The Secretary shall seek opportunities to leverage resources and support initiatives of Federal, State, and local governments in developing and promoting advanced vehicle technologies, manufacturing, and infrastructure.

(g) SECONDARY USE APPLICATIONS OF VEHICLE BATTERIES.—

(1) IN GENERAL.—The Secretary shall carry out a research, development, and demonstration program that—

(A) builds on any work carried out under section 915 of the Energy Policy Act of 2005 (42 U.S.C. 16195);

(B) identifies possible uses of a vehicle battery after the useful life of the battery in a vehicle has been exhausted;

(C) conducts long-term testing to verify performance and degradation predictions and lifetime valuations for secondary uses;

(D) evaluates innovative approaches to recycling materials from plug-in electric drive vehicles and the batteries used in plug-in electric drive vehicles;

(E) assesses the potential for markets for uses described in subparagraph (B) to develop; and

(F) identifies any barriers to the development of those markets;

(G) identifies the potential uses of a vehicle battery—

(i) with the most promise for market development; and

(ii) for which market development would be aided by a demonstration project.

(2) REPORT.—Not later than 18 months after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress an initial report on the findings of the program described in paragraph (1), including recommendations for stationary energy storage and other potential applications for batteries used in plug-in electric drive vehicles.

(3) SECONDARY USE DEMONSTRATION.—

(A) IN GENERAL.—Based on the results of the program described in paragraph (1), the Secretary shall develop guidelines for projects that demonstrate the secondary uses and innovative recycling of vehicle batteries.

(B) PUBLICATION OF GUIDELINES.—Not later than 18 months after the date of enactment of this Act, the Secretary shall—

(i) publish the guidelines described in subparagraph (A);

and

(ii) solicit applications for funding for demonstration projects.

(5) PILOT DEMONSTRATION PROGRAM.—Not later than 2 years after the date of enactment of this Act, the Secretary shall select proposals for Federal financial assistance under this subsection, based on an assessment of which proposals are mostly likely to contribute to the development of a secondary market for vehicle batteries.

(h) STUDY TO EXAMINE BATTERY SCIENCE AND TECHNOLOGY PATHWAYS.—

(1) IN GENERAL.—The Secretary shall enter into an agreement with the National Academies of Sciences, Engineering, and Medicine under which the National Academies agree to conduct a study on battery technologies to advance research toward a resilient and low-carbon transportation system and electric grid. Such study shall—

(A) identify promising battery technologies;

(B) recommend research priorities to support the development of sustainable battery value chains, including analyzing human rights, environmental impacts, and recycling and reuse infrastructure;

(C) examine market, policy, and technology barriers to their development; and

(D) recommend strategic research priorities on technology pathways to develop affordable, sustainable, safe, efficient, and long-lasting batteries to meet future transportation and energy storage demands.

(2) **REPORT.**—The agreement entered into under subsection (a) shall include a requirement that the National Academies, not later than 24 months after the date of enactment of this Act, submit to the House Committee on Science, Space and Technology, and the Senate Committee on Energy and Natural Resources a report on the results of the study conducted pursuant to such subsection.

**SEC. 6703. RESEARCH AND DEVELOPMENT PROGRAM FOR ADVANCED VEHICLE MANUFACTURING TECHNOLOGIES.**

The Secretary shall carry out a research, development, and demonstration program of advanced vehicle manufacturing technologies and practices, including innovative, efficient, and sustainable processes—

(1) to increase the production rate and decrease the cost of advanced battery and fuel cell manufacturing, including synthesis of precursor materials for electrodes;

(2) to develop technologies enabling flexible manufacturing facilities that can accommodate different battery chemistries and configurations;

(3) to reduce or repurpose waste streams, reduce emissions, and energy intensity of vehicle, engine, advanced battery, and component manufacturing processes;

(4) to recycle and remanufacture used batteries and other vehicle components for reuse in vehicles or other applications;

(5) to develop manufacturing and additive manufacturing processes to fabricate, assemble, and produce cost-effective lightweight materials with enhanced functionality such as advanced aluminum, steel, and other metal alloys, advanced polymers, polymeric composites, and carbon fiber for use in vehicles and related tooling;

(6) to leverage the use of machine learning toward manufacturing and additive manufacturing optimization;

(7) to design and manufacture purpose-built hydrogen fuel cell vehicles, hydrogen fueling infrastructure, and components;

(8) to improve the lifetime and reduce the lifecycle impacts of advanced batteries; and

(9) to reuse valuable components and materials such as permanent magnets and other electric drive components for advanced vehicles.

**SEC. 6704. AUTHORIZATION OF APPROPRIATIONS.**

There are authorized to be appropriated to the Secretary for research, development, and demonstration, of alternative fuels, vehicle propulsion systems, vehicle components, and other related technologies in the United States, including activities authorized under this subtitle—

(1) for fiscal year 2021, \$396,000,000;

(2) for fiscal year 2022, \$415,800,000;

(3) for fiscal year 2023, \$436,590,000;

(4) for fiscal year 2024, \$458,419,500; and

(5) for fiscal year 2025, \$481,340,475.

82. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE THOMPSON OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Add at the end of title V the following:

## **Subtitle E—Utility Resilience And Reliability**

### **SEC. 5501. RELIABILITY OF BULK-POWER SYSTEM IN CHANGING CONDITIONS.**

(a) **IN GENERAL.**—Not later than 1 year after the date of enactment of this paragraph, the Electric Reliability Organization shall file with the Federal Energy Regulatory Commission a proposed reliability standard, under section 215(d) of the Federal Power Act (16 U.S.C. 824o(d)), that addresses the reliability of the bulk-power system and suggestions for how to

- (1) prepare for and adapt to changing conditions; and
- (2) withstand and rapidly recover from disruptions, including disruptions caused by extreme weather conditions.

(b) **REGIONAL DIFFERENCES.**—The proposed reliability standard filed under subsection (a) shall take into account regional differences.

(c) **DEFINITIONS.**—In this section, the terms “bulk-power system”, “Electric Reliability Organization”, and “reliability standard” have the meanings given those terms in section 215 of the Federal Power Act (16 U.S.C. 824o).

### **SEC. 5502. ELECTRIC GRID RESILIENCE EDUCATION PROGRAM.**

(a) **IN GENERAL.**—Not later than 1 year after the date of enactment of this section, the Secretary of Energy shall establish a program to provide information and recommendations to States and electric utilities on how to improve the resilience of electric grids in regards to climate change and extreme weather events.

(b) **ELECTRIC UTILITY DEFINED.**—In this section, the term “electric utility” has the meaning given such term in section 3 of the Federal Power Act (16 U.S.C. 796).

### **SEC. 5503. REPORT ON PLANNED ELECTRIC POWER OUTAGES DUE TO EXTREME WEATHER CONDITIONS.**

Not later than 1 year after the date of enactment of this section, the Secretary of Energy shall submit to Congress a report, and publish such report on the website of the Department of Energy, that provides recommendations on how to minimize the need for, effects of, and duration of, planned electric power outages that are due to extreme weather conditions, including such conditions under which the National Weather Service issues a red flag warning.

83. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE THOMPSON OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Add at the end of title II the following:

## **Subtitle G—Other**

### **SEC. 2701. AMENDMENT TO ENERGY POLICY ACT OF 2005 DEFINITION OF RENEWABLE ENERGY.**

(a) **IN GENERAL.**—Section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852) is amended—

(1) in subsection (b)(2), by striking “generated” and inserting “produced”; and

(2) in subsection (c)—

(A) by redesignating paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting appropriately;

(B) in the matter preceding subparagraph (A) (as so redesignated), by striking “For purposes” and inserting the following:

“(1) **IN GENERAL.**—For purposes”; and

(C) by adding at the end the following:

“(2) **SEPARATE CALCULATION.**—

“(A) **IN GENERAL.**—For purposes of determining compliance with the requirement of this section, any energy consumption that is avoided through the use of geothermal energy shall be considered to be renewable energy produced.

“(B) **EFFICIENCY ACCOUNTING.**—Energy consumption that is avoided through the use of geothermal energy that is considered to be renewable energy under this section shall not be considered energy efficiency for the purpose of compliance with Federal energy efficiency goals, targets, and incentives.”.

(b) **CONFORMING AMENDMENT.**—Section 2410q(a) of title 10, United States Code, is amended by striking “section 203(b)(2) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)(2))” and inserting “section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b))”.

84. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE TLAIB  
OF MICHIGAN OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 894, after line 6, insert the following:

**SEC. 12606. REPORT ON EFFECTS OF EMISSIONS FROM FOSSIL FUEL  
FACILITIES.**

(a) **STUDY.**—

(1) **IN GENERAL.**—The Administrator shall conduct a study to evaluate the effect of emissions from fossil fuel facilities on the health of environmental justice communities, including such effects on the environment or that result in adverse human health for such communities.

(2) **INCLUSION.**—In evaluating effects under paragraph (1), the Administrator of the Environmental Protection Agency shall consider the distance between fossil fuel facilities and environmental justice communities.

(b) **REPORT.**—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to Congress a report that summarizes the study conducted under subsection (a).

(c) **DEFINITIONS.**—In this section:

(1) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) **ENVIRONMENTAL JUSTICE COMMUNITY.**—The term “environmental justice community” has the meaning given such term in section 11001.

(3) **FOSSIL FUEL FACILITY.**—The term “fossil fuel facility” has the meaning given such term by the Administrator for purposes of the National Emissions Inventory.

Page 894, line 7, strike “12606” and insert “12607”.



85. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE TONKO OF NEW YORK OR HIS DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 593, after line 17, insert the following new subtitle:

## **Subtitle G—Low-Carbon Fuels**

### **SEC. 6701. STUDY BY NATIONAL ACADEMY OF SCIENCES.**

(a) **IN GENERAL.**—The Administrator of the Environmental Protection Agency, after consultation with the Secretary of Energy and the Secretary of Agriculture, shall seek to enter into an agreement with the National Academy of Sciences (or, if the Academy declines, another appropriate entity) under which the Academy (or other appropriate entity) agrees to—

(1) assess current methods for life cycle greenhouse gas emissions analyses for low-carbon transportation fuels in the United States; and

(2) develop a framework for assessing broader environmental implications of low-carbon transportation fuels in addition to greenhouse gas emissions.

(b) **TIMING OF AGREEMENT.**—The Administrator shall seek to enter into the agreement described in subsection (a) not later than 60 days after the date of enactment of this Act.

(c) **ASSESSMENT.**—The assessment pursuant to subsection (a)(1) shall examine methods for calculating life cycle greenhouse gas emissions associated with transportation fuels (liquid and nonliquid), including—

(1) direct greenhouse gas emissions, including all stages of fuel and feedstock production, distribution, and use; and

(2) potentially significant indirect greenhouse gas emissions.

(d) **FRAMEWORK.**—The framework pursuant to subsection (a)(2) shall include a recommended framework and approaches for detailed quantitative assessments of the comparative environmental implications of low-carbon transportation fuels (liquid and nonliquid), including—

(1) life cycle implications for air, water, land, and ecosystems in different regions of the United States and over time; and

(2) potential environmental implications over the life cycle of transportation fuels for low-income and disadvantaged communities and communities of color.

(e) **REPORTS.**—The agreement under subsection (a) shall provide for the publication by the Academy (or other appropriate entity) of—

(1) not later than 12 months after the date of enactment of this Act, a report—

(A) describing the results of the assessment under subsection (a)(1); and

(B) recommending a standardized approach to calculating life cycle greenhouse gas emissions from low-carbon transportation fuels (liquid and nonliquid); and

(2) not later than 18 months after the date of enactment of this Act, a report providing recommendations for a framework to assess environmental implications, in addition to greenhouse gas emissions, of low-carbon transportation fuels (liquid and nonliquid).

(f) **DEFINITIONS.**—In this section:

(1) **ACADEMY.**—The term “Academy” means the National Academy of Sciences.

(2) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(3) **LIFE CYCLE GREENHOUSE GAS EMISSIONS.**—The term “life cycle greenhouse gas emissions” means the aggregate quantity of

greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the Academy (or other appropriate entity) over the full life cycle of the respective greenhouse gases, across all stages of a given fuel's supply chain, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential and residence time.

(4) OTHER APPROPRIATE ENTITY.—The term “other appropriate entity” means the other appropriate entity with which the agreement under subsection (a) is entered into if the Academy declines to enter into the agreement.

86. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
WATERS OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 557, line 24, strike “and”.

Page 558, line 6, strike “census tracts.” and insert “census tracts; and”.

Page 558, after line 6, insert the following:

(vi) identify the potential for, and obstacles to, recruiting and entering into contracts with locally-owned small and disadvantaged businesses, including women- and minority-owned businesses, to deploy electric vehicle charging infrastructure in underserved or disadvantaged communities in major urban areas and rural areas.

87. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
WATERS OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 41, line 7, strike “and”.

Page 41, line 13, strike the period and insert “; and”.

Page 41, after line 13, insert the following:

(7) to identify diverse candidates and firms when procuring for the design and construction of training and assessment centers.

88. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
WATERS OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 664, line 21, strike “; and” and insert a semicolon.

Page 664, line 23, strike the period at the end and insert “; and”.

Page 664, after line 23, insert the following:

(E) whether the project will be of benefit or use to diverse and underserved communities.

89. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
WATERS OF CALIFORNIA OR HER DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 101, line 10, after “means” insert “a manufactured home (as such term is defined in section 603 of the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. 5402)), or”.

Page 103, after line 20, insert the following:

(16) MULTIFAMILY BUILDING.—The term “multifamily building” means a structure with 5 or more tenant-occupied residential dwelling units that—

(A) is located in the United States;

(B) was constructed before the date of enactment of this Act;

and

(C) is occupied at least 6 months out of the year.

(17) MULTIFAMILY BUILDING OWNER.—The term “multifamily building owner” means the owner of a tenant-occupied multifamily building.

Page 106, line 12, before the semicolon insert “, including energy audits and assessments relevant to multifamily buildings”.

Page 106, line 13, after “home” insert “and multifamily building”.

Page 112, line 5: after “homeowner” insert “or multifamily building owner”.

Page 112, line 10, before the semicolon insert “or the household living in a multifamily building”.

Page 112, line 13, after “homeowner” insert “or the household living in a multifamily building”.

Page 114, line 11, after “home” insert “of a homeowner or household living in a multifamily building”.

Page 114, line 22, before the semicolon insert “or the applicable multifamily building owner has signed and submitted an agreement with the contractor to provide whole-building aggregate information about the building’s energy use”.

Page 115, line 1, after “home” insert “of a homeowner or for the household living in a multifamily building”.

Page 115, line 10, after “homeowner” insert “or multifamily building owner”.

Page 115, line 24: after “homeowners” insert “and multifamily building owners”.

Page 116, line 9, after “homeowner” insert “or multifamily building owner”.

Page 125, line 24, before “is moderate” insert “or that, in the case of a multifamily building, the majority of households in the building”.

Page 126, line 2, strike “of homeowners”.

Page 126, lines 18 and 19, strike “of homeowners”.

Page 127, line 1, after “homeowner” insert “or the household living in a multifamily building”.

Page 127, line 5, after “homeowner” insert “or the household living in a multifamily building”.

Page 128, line 4, before “that are certified” insert “or multifamily building owners”.

Page 128, line 12, before the first comma insert “and owners”.

Page 130, line 6, strike “\$1,200,000,000” and insert “\$1,600,000,000”.



90. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE WILD OF PENNSYLVANIA OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Page 830, after line 5, insert the following:

**PART 3—CLEAN ENERGY ECONOMY WORKFORCE**  
**SEC. 12121. CLEAN ENERGY ECONOMY WORKFORCE PROGRAM.**

(a) DEFINITIONS.—In this section:

(1) COAL-RELATED FACILITY.—The term “coal-related facility” includes a coal mine or coal-fueled electric generating facility.

(2) COAL-RELATED GENERATING FACILITY.—The term “coal-related industrial facility” includes a facility in the manufacturing and transportation supply chains of a coal-related facility.

(3) ELIGIBLE ENTITY.—The term “eligible entity” means a National Laboratory, business, or labor organization that demonstrates success in placing graduates of pre-apprenticeship or apprenticeship programs in jobs relevant to such programs and—

(A) is directly involved with zero-emission electricity technology, energy efficiency, or other activity that results in a reduction in greenhouse gas emissions, as determined by the Secretary;

(B) works on behalf of a business or labor organization that is directly involved with zero emission electricity technology, energy efficiency, or other activity that results in a reduction in greenhouse gas emissions, as determined by the Secretary;

(C) provides services related to—

(i) zero emission electricity technology deployment and maintenance and energy efficiency;

(ii) grid modernization; or

(iii) reduction in greenhouse gas emissions through the use of zero-emission energy technologies;

(D) has knowledge of technician workforce needs of a National Laboratory or covered facility of the National Nuclear security Administration and the associated security requirements of such laboratory or facility;

(E) demonstrates experience in implementing and operating apprenticeship programs or pre-apprenticeship programs that provide a direct pathway to an energy-related career; or

(F) demonstrates success in placing graduates of pre-apprenticeship or apprenticeship programs in jobs relevant to such programs.

(4) ENERGY TRANSITION WORKER.—The term “Energy Transition Worker” means a worker, including workers employed by contractors or subcontractors, terminated, laid off from employment, or whose work hours have been reduced, on or after the date of enactment of this Act, from a coal-related facility, coal-related industrial facility or other energy related entity.

(5) NATIONAL LABORATORY.—The term “National Laboratory” means any of the following laboratories owned by the Department of Energy:

(A) Ames Laboratory.

(B) Argonne National Laboratory.

(C) Brookhaven National Laboratory.

(D) Fermi National Accelerator Laboratory.



- (E) Idaho National Laboratory.
- (F) Lawrence Berkeley National Laboratory.
- (G) Lawrence Livermore National Laboratory.
- (H) Los Alamos National Laboratory.
- (I) National Energy Technology Laboratory.
- (J) National Renewable Energy Laboratory.
- (K) Oak Ridge National Laboratory.
- (L) Pacific Northwest National Laboratory.
- (M) Princeton Plasma Physics Laboratory.
- (N) Sandia National Laboratories.
- (O) Savannah River National Laboratory.
- (P) Stanford Linear Accelerator Center.
- (Q) Thomas Jefferson National Accelerator Facility.

(6) PROGRAM.—The term “program” means the program established under subsection (b).

(b) ESTABLISHMENT.—The Secretary of Energy, in consultation with the Secretary of Labor, shall establish a program to provide competitively awarded cost shared grants to eligible entities to pay for pre-apprenticeship training for individuals or on-the-job training of a new or existing employee

(1) to work in zero emission electricity generation, energy efficiency, or grid modernization;

(2) to work otherwise on the reduction of greenhouse gas emissions;

or

(3) to participate in a pre-apprenticeship program that provides a direct pathway to an energy-related career in construction through one or more apprenticeship programs.

(c) GRANTS.—

(1) IN GENERAL.—An eligible entity desiring a grant under the program shall submit to the Secretary of Energy an application at such time, in such manner, and containing such information as the Secretary of Energy may require.

(2) PRIORITY FOR TARGETED COMMUNITIES.—In providing grants under the program, the Secretary of Energy shall give priority to an eligible entity that—

(A) recruits employees—

(i) from the 1 or more communities that are served by the eligible entity; and

(ii) that are minorities, women, veterans, individuals from Indian Tribes or Tribal organizations, or energy transition workers;

(B) provides trainees with the opportunity to obtain real-world experience; or

(C) has fewer than 100 employees; and

(D) in the case of a pre-apprenticeship program, demonstrates—

(i) a multi-year record of successfully recruiting energy transition workers, minorities, women, and veterans for training and supporting such individuals to a successful completion of a pre-apprenticeship program; and

(ii) a successful multi-year record of placing the majority of pre-apprenticeship program graduates into apprenticeship programs in the construction industry.

(3) USE OF GRANT FOR FEDERAL SHARE.—

(A) IN GENERAL.—An eligible entity shall use a grant received under the program to—

(i) pay the Federal share of the cost of providing pre-apprenticeship training or on-the-job training for an individual, in accordance with subparagraph(B); or

(ii) in the case of a pre-apprenticeship program—

(I) recruiting minorities, women, and veterans for training;

(II) supporting those individuals in the successful completion of the pre-apprenticeship program; and

(III) carrying out any other activity of the pre-apprenticeship program, as determined to be appropriate by the Secretary of Labor, in consultation with the Secretary.

(B) FEDERAL SHARE AMOUNT.—The Federal share described in subparagraph (A)(i) shall not exceed—

(i) in the case of an eligible entity with 20 or fewer employees, 45 percent of the cost of on-the-job-training for an employee;

(ii) in the case of an eligible entity with not fewer than 21 employees and not more than 99 employees, 37.5 percent of the cost of on-the-job-training for an employee;

(iii) in the case of an eligible entity with not fewer than 100 employees, 20 percent of the cost of on-the-job-training for an employee; and

(iv) in the case of an eligible entity that administers a pre-apprenticeship program, 75 percent of the cost of the pre-apprenticeship program.

(4) EMPLOYER PAYMENT OF NON-FEDERAL SHARE.—

(A) IN GENERAL.—The non-Federal share of the cost of providing on-the-job training for an employee under a grant received under the program shall be paid in cash or in kind by the employer of the employee receiving the training or by a nonprofit organization.

(B) INCLUSIONS.—The non-Federal share described in subparagraph (A) may include the amount of wages paid by the employer to the employee during the time that the employee is receiving on-the-job training, as fairly evaluated by the Secretary of Labor.

(5) CONSTRUCTION.—In providing grants under the program for training, recruitment, and support relating to construction, eligible entities shall only include pre-apprenticeship programs that have an articulation agreement with one or more apprenticeship programs.

(6) GRANT AMOUNT.—An eligible entity may not receive more than \$1,000,000 per fiscal year in grant funds under the program.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated \$25,000,000 to the Secretary of Energy to carry out the program for each of the fiscal years 2021 through 2030.

Page 9, after the matter relating to section 12113, insert the following:

### PART 3—CLEAN ENERGY ECONOMY WORKFORCE

91. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
WILSON OF SOUTH CAROLINA OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

Page 425, line 20, strike "and".

Page 426, line 14, strike the period and insert "; and".

Page 426, after line 14, insert the following:

"(11) evaluate potential demonstration sites across the Department  
of Energy complex."

92. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BERA  
OF CALIFORNIA OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Page 500, after line 13, insert the following (and redesignate subsections (c), (d), and (e) as subsections (d), (e), and (f), respectively):

(g) CONCURRENT AND CO-LOCATED DISASTERS.—In carrying out the program under subsection (a), the Secretary shall support research and development on tools, techniques, and technologies for improving electric grid and energy sector safety and resilience in the event of multiple simultaneous or co-located weather or climate events leading to extreme conditions, such as extreme wind, wildfires, and extreme heat.

93. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
BLUMENAUER OF OREGON OR HIS DESIGNEE, DEBATABLE FOR  
10 MINUTES

Page 403, after line 21, insert the following:

(3) REPORT.—The Secretary shall submit annually a public report to the Congressional Committees of Jurisdiction documenting funds spent under the program, including those that could benefit the entirety of the existing reactor fleet, such as with respect to aging management and related sustainability concerns, and identifying funds awarded to private entities.

Page 407, line 11, insert “In carrying out this paragraph, the Secretary shall convene an advisory committee of such individuals and such committee shall submit annually a report to the relevant committees of Congress with respect to the progress of the program.”

94. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
DEGETTE OF COLORADO OR HER DESIGNEE, DEBATABLE FOR  
10 MINUTES

At the end of subtitle F of title XII, add the following:

**SEC. \_\_. GAS WASTE REDUCTION AND ENHANCEMENT OF GAS MEASURING AND REPORTING.**

(a) **IN GENERAL.**—Title I of the Federal Oil and Gas Royalty Management Act of 1982 (30 U.S.C. 1711 et seq.) is amended by adding at the end the following:

**“SEC. 118. GAS WASTE REDUCTION AND ENHANCEMENT OF GAS MEASURING AND REPORTING.**

**“(a) REGULATIONS FOR PREVENTING AND REDUCING WASTE OF GAS VIA VENTING, FLARING, AND FUGITIVE RELEASES.—**

**“(1) REQUIREMENT TO ISSUE REGULATIONS.**—Not later than 2 years after the date of enactment of this section, the Secretary shall issue regulations pursuant to the Secretary’s authority under the Mineral Leasing Act, the Federal Land Policy and Management Act of 1976, the Indian Mineral Leasing Act of 1938, and other statutes authorizing the Secretary to regulate oil and gas activities on Federal land and Indian lands, that establish requirements for reducing and preventing the waste of gas, including by venting, flaring, and fugitive releases, from covered operations.

**“(2) CONTENT OF REGULATIONS.**—The regulations shall, with respect to covered operations—

**“(A) require that, beginning not later than 3 years after the date of enactment of this section, each operator captures at least 85 percent of all gas produced in each year from each onshore well that is subject to a mineral leasing law;**

**“(B) require that, beginning not later than 5 years after the date of enactment of this section, each operator captures at least 99 percent of all gas produced in each year from each onshore well that is subject to a mineral leasing law;**

**“(C) require flaring of gas, rather than venting, in all instances in which gas is not captured;**

**“(D) require that every application for a permit to drill a production well—**

**“(i) demonstrate sufficient infrastructure and capacity is in place to capture the expected quantity of produced gas from the well; and**

**“(ii) be published with an opportunity for a public comment period of at least 30 days;**

**“(E) beginning not later than 2 years after the date of enactment of this section, prohibit all new and refractured production wells from flaring;**

**“(F) require the operator of any covered operation that routinely flares gas before the effective date of a regulation prohibiting flaring issued pursuant to subparagraph (E) to submit a gas capture plan to the Secretary not later than 180 days before such effective date that ensures that such operator will meet the requirements described in subparagraphs (A) and (B);**

**“(G) set performance standards for newly installed equipment based on modern equipment that minimize gas loss from—**

**“(i) storage tanks;**

**“(ii) dehydrators;**

“(iii) compressors;

“(iv) open-ended valves or lines;

“(v) pumps; and

“(vi) such other equipment as the Secretary determines appropriate to reduce and prevent gas release;

“(H) require that operators replace existing equipment within one year of the publication date of performance standards established under subsection (G);

“(I) require the replacement of all high-bleed gas-actuated pneumatic devices with low-bleed or no-bleed devices not later than 180 days after the date of issuance of the regulation enacted under subparagraph (A);

“(J) set performance standards based on modern procedures and equipment that minimize gas loss from—

“(i) downhole maintenance;

“(ii) liquids unloading;

“(iii) well completion; and

“(iv) such other procedures as the Secretary determines appropriate to reduce and prevent gas release;

“(K) require all operators to have leak detection programs with regularly scheduled inspections that assess the entire covered operation using an infrared camera or other equipment with methods that provide overall at least equivalent sensitivity and effectiveness in detecting leaks on a timely basis;

“(L) require any leaks found to be repaired promptly, and in any case not later than 4 weeks after the discovery of the leak, except where exceptional circumstances warrant an extension of not more than 8 additional weeks; and

“(M) require recordkeeping for—

“(i) equipment maintenance;

“(ii) leak detection and repair;

“(iii) venting events;

“(iv) flaring events; and

“(v) such other operations as the Secretary determines appropriate to reduce and prevent gas release.

“(b) GAS MEASURING, REPORTING, AND TRANSPARENCY REQUIREMENTS.—

“(1) IN GENERAL.—The Secretary shall, not later than one year after the date of enactment of this section, issue regulations requiring each operator to measure and report, with respect to all gas subject to the mineral leasing laws, all such gas produced, consumed on site, or lost through venting, flaring, or fugitive releases.

“(2) MEASURING AND REPORTING REQUIREMENTS.—To account for all gas referred to in paragraph (1), the Secretary shall issue regulations requiring each operator to—

“(A) measure all production and disposition of gas with such accuracy that fugitive gas releases can be calculated;

“(B) install metering devices to measure all flared gas; and

“(C) report to the Secretary the volumes of gas measured under the requirements described in subparagraph (A), including—

“(i) all new measured values for production and disposition, including vented and flared volumes; and

“(ii) values for fugitive releases based on guidelines for their calculation established by the Secretary in such regulations.

“(3) TRANSPARENCY.—The Secretary shall make all new data produced under the requirements established by the Secretary under this subsection, including calculated fugitive releases and volumes of gas lost to venting and flaring, publicly available through the internet—

“(A) without a fee or other access charge;

“(B) in a searchable, sortable, and downloadable manner, to the extent technically possible; and

“(C) as soon as technically practicable after the report by the operator is filed.

“(c) APPLICATION.—Except as otherwise specified in this section, the requirements established by the Secretary under this section shall apply to

“(1) the construction and operation of any covered operation initiated, including the refracturing of existing wells, on or after the date of the issuance of regulations under this section; and

“(2) after the end of the 1-year period beginning on the date of the issuance of such regulations, any covered operation initiated before the date of the issuance of such regulations.

“(d) ENFORCEMENT MECHANISMS.—

“(1) IN GENERAL.—The Secretary shall include in the regulations issued under this section consistent enforcement mechanisms for covered operations that are not in compliance with the requirements established by the regulations.

“(2) REQUIREMENTS.—The Secretary shall include in the enforcement mechanisms described in paragraph (1)—

“(A) civil penalties for unauthorized venting and flaring, which shall—

“(i) apply in lieu of the penalties and related provisions under section 109; and

“(ii) include production restrictions and civil monetary penalties equivalent to 3 times the market value of the vented or flared gas; and

“(B) civil penalties that apply to noncompliance with other new or existing procedures, which shall—

“(i) apply in addition to or in lieu of the penalties and related provisions under section 109;

“(ii) include production restrictions or monetary penalties, or both; and

“(iii) in the case of monetary penalties, be proportional to market conditions.

“(e) DEFINITIONS.—In this section:

“(1) CAPTURE.—The term ‘capture’ means the physical containment of natural gas for transportation to market or productive use of natural gas, and includes reinjection and royalty-free on-site uses.

“(2) COVERED OPERATIONS.—The term ‘covered operations’ means all oil and gas operations that are subject to mineral leasing law or title V of the Federal Land Policy and Management Act of 1976 (30 U.S.C. 1761 et seq.), regardless of size, including production, storage, gathering, processing, and handling operations.

“(3) FLARE AND FLARING.—The terms ‘flare’ and ‘flaring’ mean the intentional and controlled burning of gas that occurs in the course of oil and gas operations to limit release of gas to the atmosphere.

“(4) FUGITIVE RELEASE.—The term ‘fugitive release’ means the unintentional and uncontrolled release of gas into the atmosphere in the course of oil and gas operations.

“(5) GAS CAPTURE PLAN.—The term ‘gas capture plan’ means a plan that includes specific goals, including equipment and timelines, for capturing, gathering, and processing gas produced under an oil or gas lease.

“(6) GAS RELEASE.—The term ‘gas release’ includes all gas that is discharged to the atmosphere via venting or fugitive release.

“(7) VENT AND VENTING.—The terms ‘vent’ and ‘venting’ mean the intentional and controlled release of gas into the atmosphere in the course of oil and gas operations.”.



(b) CLERICAL AMENDMENT.—The table of contents in section 1 of such Act is amended by inserting after the item relating to section 117 the following:

“Sec. 118. Gas waste reduction and enhancement of gas measuring and reporting.”.

(c) UPDATES.—The Secretary of the Interior shall update the regulations required by the amendments made by this section when the Secretary determines appropriate, but no less frequently than once every ten years, to reflect new information regarding gas waste, the impacts of that waste, and the availability of technologies and performance measures to reduce gas waste.

(d) APPLICATION OF PRIOR RULE.—The final rule entitled “Waste Prevention, Production Subject to Royalties, and Resource Conservation”, as published in the Federal Register November 18, 2016 (81 Fed. Reg. 83008), is hereby reinstated, and each of its provisions shall apply unless and until the effective date of a subsequent final rule promulgated under the amendment made by subsection (a), or promulgated under another applicable authority, that replaces or repeals such provision.

(e) ASSESSMENT OF VENTING, FLARING, AND FUGITIVE RELEASES.—Not later than 180 days after the end of the 1-year period beginning on the date the Secretary of the Interior first receives data submitted under the requirements established under subsection (b) of section 118 of the Federal Oil and Gas Royalty Management Act of 1982, as amended by this section, the Secretary shall—

(1) submit a report to Congress describing—

(A) the volume of fugitive releases, and gas consumed or lost by venting and flaring, from covered operations (as those terms are used in such section); and

(B) additional regulations the Secretary considers would help further curtail venting, flaring, and fugitive releases, or the rational basis for not issuing such additional regulations if the Secretary considers additional regulations would not be appropriate to further curtail venting, flaring, and fugitive releases; and

(2) issue regulations described in the report required by paragraph

(1)(B) not later than 1 year after the date of the submission of the report.

95. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE  
KRISHNAMOORTHY OF ILLINOIS OR HIS DESIGNEE, DEBATABLE  
FOR 10 MINUTES

~~AMENDMENT TO RULES COMMITTEE PRINT 116- 63  
OFFERED BY MR. KRISHNAMOORTHY OF ILLINOIS~~

Page 192, beginning on line 4, strike “eligible entity is located” and insert “eligible entity is located, which campaign shall include providing projected environmental benefits achieved under the project, where to find more information about the program established under this section, and any other information the Secretary determines necessary”.

96. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE CLARK OF MASSACHUSETTS OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

At the end of subtitle A of title III, add the following:

**SECTION 3115. CARBON DIOXIDE REMOVAL TASK FORCE AND REPORT.**

(a) **REPORT.**—Not later than 180 days after the date of enactment of this Act, the Secretary of Energy (referred to in this section as the “Secretary”), in consultation with the head of any other relevant Federal agency, shall prepare a report that—

(1) estimates the magnitude of excess carbon dioxide in the atmosphere that will need to be removed by 2050 to achieve net-zero emissions and stabilize the climate;

(2) inventories current and emerging approaches of carbon dioxide removal and evaluates the advantages and disadvantages of each such approach; and

(3) identifies recommendations for legislation, funding, rules, revisions to rules, financing mechanisms, or other policy tools that the Federal Government can use to sufficiently advance the deployment of carbon dioxide removal projects in order to meet, in the aggregate, the magnitude of needed removals estimated under paragraph (1), including policy tools such as—

(A) grants;

(B) loans or loan guarantees;

(C) public-private partnerships;

(D) direct procurement;

(E) incentives, including subsidized Federal financing mechanisms available to project developers;

(F) advance market commitments;

(G) regulations; and

(H) and any other policy mechanism determined by the Secretary to be beneficial for advancing carbon dioxide removal methods and the deployment of carbon dioxide removal projects.

(b) **SUBMISSION; PUBLICATION.**—The Secretary shall submit the report prepared under subsection (a) to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives, and as soon as practicable, make the report publicly available.

(c) **EVALUATION.**—The Secretary shall—

(1) not later than 2 years after the publication of the report under subsection (a), and every 2 years thereafter, evaluate the findings and recommendations of the report, taking into consideration any issues and recommendations identified by the task force established under subsection (d); and

(2) after each evaluation under paragraph (1), revise the report as necessary and submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives an updated report.

(d) **TASK FORCE.**—

(1) **ESTABLISHMENT AND DUTIES.**—Not later than 60 days after the date of enactment of this Act, the Secretary shall establish a task force to—

(A) identify barriers to advancement of carbon dioxide removal methods and the deployment of carbon dioxide removal projects;

(B) inventory existing or potential Federal legislation, rules, revisions to rules, financing mechanisms, or other policy tools that are capable of advancing carbon dioxide removal methods and the deployment of carbon dioxide removal projects;

(C) assist in drafting the report described in subsection (a) and any updates thereto; and

(D) advise the Secretary on matters pertaining to carbon dioxide removal.

(2) MEMBERS AND SELECTION.—The Secretary shall—

(A) develop criteria for the selection of members to the task force; and

(B) select members for the task force in accordance with the criteria developed under subparagraph (A).

(3) MEETINGS.—The task force shall meet not less than once each year.

(4) EVALUATION.—Not later than 7 years after the date of enactment of this Act, the Secretary shall—

(A) reevaluate the need for the task force; and

(B) submit to Congress a recommendation as to whether the task force should continue.

(e) CARBON DIOXIDE REMOVAL DEFINITION.—In this section, the term “carbon dioxide removal” means the capture of carbon dioxide directly from ambient air or, in dissolved form, from seawater, combined with the sequestration of such carbon dioxide, including through direct air capture and sequestration, enhanced carbon mineralization, bioenergy with carbon capture and sequestration, forest restoration, soil carbon management, and direct ocean capture.

97. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE BLUNT ROCHESTER OF DELAWARE OR HER DESIGNEE, DEBATABLE FOR 10 MINUTES

Add at the end of title VI the following:

## **Subtitle G—Climate Action Planning For Ports**

### **SEC. 6701. GRANTS TO REDUCE GREENHOUSE GAS EMISSIONS AT PORTS.**

(a) GRANTS.—The Administrator of the Environmental Protection Agency may award grants to eligible entities—

(1) to implement plans to reduce greenhouse gas emissions at one or more ports or port facilities within the jurisdictions of the respective eligible entities; and

(2) to develop climate action plans described in subsection (b)(2).

(b) APPLICATION.—

(1) IN GENERAL.—To seek a grant under this section, an eligible entity shall submit an application to the Administrator of the Environmental Protection Agency at such time, in such manner, and containing such information and assurances as the Administrator may require.

(2) CLIMATE ACTION PLAN.—At a minimum, each such application shall contain—

(A) a detailed and strategic plan, to be known as a climate action plan, that outlines how the eligible entity will develop and implement climate change mitigation or adaptation measures through the grant; or

(B) a request pursuant to subsection (a)(2) for funding for the development of a climate action plan.

(3) REQUIRED COMPONENTS.—A climate action plan under paragraph (2) shall demonstrate that the measures proposed to be implemented through the grant—

(A) will reduce greenhouse gas emissions at the port or port facilities involved pursuant to greenhouse gas emission reduction goals set forth in the climate action plan;

(B) will reduce other air pollutants at the port or port facilities involved pursuant to criteria pollutant emission reduction goals set forth in the climate action plan;

(C) will implement emissions accounting and inventory practices to determine baseline emissions and measure progress; and

(D) will ensure labor protections for workers employed directly at the port or port facilities involved, including by—

(i) demonstrating that implementation of the measures proposed to be implemented through the grant will not result in a net loss of jobs at the port or port facilities involved;

(ii) ensuring that laborers and mechanics employed by contractors and subcontractors on construction projects to implement the plan will be paid wages not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor under sections 3141 through 3144, 3146, and 3147 of title 40, United States Code; and

(iii) requiring any projects initiated to carry out the plan with total capital costs of \$1,000,000 or greater to utilize a

project labor agreement and not impact any preexisting project labor agreement.

(4) OTHER COMPONENTS.—In addition to the components required by paragraph (3), a climate action plan under paragraph (2) shall demonstrate that the measures proposed to be implemented through the grant will do at least 2 of the following:

(A) Improve energy efficiency at a port or port facility, including by using—

(i) energy-efficient vehicles, such as hybrid, low-emission, or zero-emission vehicles;

(ii) energy efficient cargo-handling, harbor vessels, or storage facilities such as energy-efficient refrigeration equipment;

(iii) energy-efficient lighting;

(iv) shore power; or

(v) other energy efficiency improvements.

(B) Deploy technology or processes that reduce idling of vehicles at a port or port facility.

(C) Reduce the direct emissions of greenhouse gases and other air pollutants with a goal of achieving zero emissions, including by replacing and retrofitting equipment (including vehicles onsite, cargo-handling equipment, or harbor vessels) at a port or port facility.

(5) PROHIBITED USE.—An eligible entity may not use a grant provided under this section—

(A) to purchase fully automated cargo handling equipment;

(B) to build, or plan to build, terminal infrastructure that is designed for fully automated cargo handling equipment;

(C) to purchase, test, or develop highly automated trucks, chassis, or any related equipment that can be used to transport containerized freight; or

(D) to extend to any independent contractor, independent owner, operator, or other entity that is not using employees for the sake of performing work on terminal grounds.

(6) COORDINATION WITH STAKEHOLDERS.—In developing a climate action plan under paragraph (2), an eligible entity shall—

(A) identify and collaborate with stakeholders who may be affected by the plan, including local environmental justice communities and other near-port communities;

(B) address the potential cumulative effects of the plan on stakeholders when those effects may have a community-level impact; and

(C) ensure effective advance communication with stakeholders to avoid and minimize conflicts.

(c) PRIORITY.—In awarding grants under this section, the Administrator of the Environmental Protection Agency shall give priority to applicants proposing—

(1) to strive for zero emissions as a key strategy within the grantee's climate action plan under paragraph (2);

(2) to take a regional approach to reducing greenhouse gas emissions at ports;

(3) to collaborate with near-port communities to identify and implement mutual solutions to reduce air pollutants at ports or port facilities affecting such communities, with emphasis given to implementation of such solutions in near-port communities that are environmental justice communities;

(4) to implement activities with off-site benefits, such as by reducing air pollutants from vehicles, equipment, and vessels at sites other than the port or port facilities involved; and

(5) to reduce localized health risk pursuant to health risk reduction goals that are set within the grantee's climate action plan under

paragraph (2).

(d) MODEL METHODOLOGIES.—The Administrator of the Environmental Protection Agency shall—

(1) develop model methodologies which grantees under this section may choose to use for emissions accounting and inventory practices referred to in subsection (b)(3)(C); and

(2) ensure that such methodologies are designed to measure progress in reducing air pollution at near-port communities.

(e) DEFINITIONS.—In this section:

(1) The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) The term “cargo-handling equipment” includes—

(A) ship-to-shore container cranes and other cranes;

(B) container-handling equipment; and

(C) equipment for moving or handling cargo, including trucks, reachstackers, toploaders, and forklifts.

(3) The term “eligible entity” means—

(A) a port authority;

(B) a State, regional, local, or Tribal agency that has jurisdiction over a port authority or a port;

(C) an air pollution control district; or

(D) a private entity (including any nonprofit organization) that

—

(i) applies for a grant under this section in collaboration with an entity described in subparagraph (A), (B), or (C); and

(ii) owns, operates, or uses a port facility, cargo equipment, transportation equipment, related technology, or a warehouse facility at a port or port facility.

(4) The term “environmental justice community” means a community with significant representation of communities of color, low-income communities, or Tribal and indigenous communities, that experiences, or is at risk of experiencing, higher or more adverse human health or environmental effects.

(5) The term “harbor vessel” includes a ship, boat, lighter, or maritime vessel designed for service at and around harbors and ports.

(6) The term “inland port” means a logistics or distribution hub that is located inland from navigable waters, where cargo, such as break-bulk cargo or cargo in shipping containers, is processed, stored, and transferred between trucks, rail cars, or aircraft.

(7) The term “port” includes an inland port.

(8) The term “stakeholder” means residents, community groups, businesses, business owners, labor unions, commission members, or groups from which a near-port community draws its resources that—

(A) have interest in the climate action plan of a grantee under this section; or

(B) can affect or be affected by the objectives and policies of such a climate action plan.

(f) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—To carry out this subtitle, there is authorized to be appropriated \$250,000,000 for each of fiscal years 2021 through 2025.

(2) DEVELOPMENT OF CLIMATE ACTION PLANS.—In addition to the authorization of appropriations in paragraph (1), there is authorized to be appropriated for grants pursuant to subsection (a)(2) to develop climate action plans \$50,000,000 for fiscal year 2021, to remain available until expended.



98. AN AMENDMENT TO BE OFFERED BY REPRESENTATIVE LUJÁN  
OF NEW MEXICO OR HIS DESIGNEE, DEBATABLE FOR 10  
MINUTES

Add at the end of title VIII the following:

**Subtitle D—Increasing And  
Mobilizing Partnerships To  
Achieve Commercialization Of  
Technologies For Energy**

**SEC. 8401.SHORT TITLE.**

This subtitle may be cited as the “Increasing and Mobilizing Partnerships to Achieve Commercialization of Technologies for Energy Act” or the “IMPACT for Energy Act”.

**SEC. 8402. DEFINITIONS.**

In this subtitle:

(1) **BOARD.**—The term “Board” means the Board of Directors described in section 8403(b)(1).

(2) **DEPARTMENT.**—The term “Department” means the Department of Energy.

(3) **EXECUTIVE DIRECTOR.**—The term “Executive Director” means the Executive Director described in section 8403(e)(1).

(4) **FOUNDATION.**—The term “Foundation” means the Energy Technology Commercialization Foundation established under section 8403(a).

(5) **NATIONAL LABORATORY.**—The term “National Laboratory” has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(6) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

**SEC. 8403.ENERGY TECHNOLOGY COMMERCIALIZATION FOUNDATION.**

(a) **ESTABLISHMENT.**—

(1) **IN GENERAL.**—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a nonprofit corporation to be known as the “Energy Technology Commercialization Foundation”.

(2) **MISSION.**—The mission of the Foundation shall be—

(A) to support the mission of the Department; and

(B) to advance collaboration with energy researchers, institutions of higher education, industry, and nonprofit and philanthropic organizations to accelerate the commercialization of energy technologies.

(3) **LIMITATION.**—The Foundation shall not be an agency or instrumentality of the Federal Government.

(4) **TAX-EXEMPT STATUS.**—The Board shall take all necessary and appropriate steps to ensure that the Foundation receives a determination from the Internal Revenue Service that it is an organization that is described in section 501(c) of the Internal Revenue Code of 1986, and exempt from taxation under section 501(a) of such Code.

(5) **COLLABORATION WITH EXISTING ORGANIZATIONS.**—The Secretary may collaborate with 1 or more organizations to establish the

Foundation and carry out the activities of the Foundation.

(b) BOARD OF DIRECTORS.—

(1) ESTABLISHMENT.—The Foundation shall be governed by a Board of Directors.

(2) COMPOSITION.—

(A) IN GENERAL.—The Board shall be composed of the members described in subparagraph (B).

(B) BOARD MEMBERS.—

(i) INITIAL MEMBERS.—The Secretary shall—

(I) enter into a contract with the National Academies of Sciences, Engineering, and Medicine to develop a list of individuals to serve as members of the Board who are well-qualified and will meet the requirements of clauses (ii) and (iii); and

(II) appoint the initial members of the Board, in consultation with the National Academies of Sciences, Engineering, and Medicine, with the requirements of clauses (ii) and (iii).

(ii) REPRESENTATION.—The members of the Board shall reflect a broad cross-section of stakeholders from academia, industry, nonprofit organizations, State or local governments, the investment community, the philanthropic community, and management and operating contractors of the National Laboratories.

(iii) EXPERIENCE.—The Secretary shall ensure that a majority of the members of the Board—

(I)(aa) has experience in the energy sector;

(bb) has research experience in the energy field; or

(cc) has experience in technology commercialization or foundation operations; and

(II) to the extent practicable, represents diverse regions and energy sectors.

(3) CHAIR AND VICE CHAIR.—

(A) IN GENERAL.—The Board shall designate from among the members of the Board—

(i) an individual to serve as Chair of the Board; and

(ii) an individual to serve as Vice Chair of the Board.

(B) TERMS.—The term of service of the Chair and Vice Chair of the Board shall end on the earlier of—

(i) the date that is 3 years after the date on which the Chair or Vice Chair of the Board, as applicable, is designated for the position; and

(ii) the last day of the term of service of the member, as determined under paragraph (4)(A), who is designated to be Chair or Vice Chair of the Board, as applicable.

(C) REPRESENTATION.—The Chair and Vice Chair of the Board—

(i) shall not be representatives of the same area or entity, as applicable, under paragraph (2)(B)(ii); and

(ii) shall not be representatives of any area or entity, as applicable, represented by the immediately preceding Chair and Vice Chair of the Board.

(4) TERMS AND VACANCIES.—

(A) TERMS.—

(i) IN GENERAL.—Except as provided in clause (ii), the term of service of each member of the Board shall be 5 years.

(ii) INITIAL MEMBERS.—Of the initial members of the Board appointed under paragraph (2)(B)(i), half of the members shall serve for 4 years and half of the members shall serve for 5 years, as determined by the Chair of the Board.

(B) VACANCIES.—Any vacancy in the membership of the Board—

(i) shall be filled in accordance with the bylaws of the Foundation by an individual capable of representing the same area or entity, as applicable, as represented by the vacating board member under paragraph (2)(B)(ii);

(ii) shall not affect the power of the remaining members to execute the duties of the Board; and

(iii) shall be filled by an individual selected by the Board.

(5) MEETINGS; QUORUM.—

(A) INITIAL MEETING.—Not later than 60 days after the Board is established, the Secretary shall convene a meeting of the members of the Board to incorporate the Foundation.

(B) QUORUM.—A majority of the members of the Board shall constitute a quorum for purposes of conducting the business of the Board.

(6) DUTIES.—The Board shall—

(A) establish bylaws for the Foundation in accordance with paragraph (7);

(B) provide overall direction for the activities of the Foundation and establish priority activities;

(C) carry out any other necessary activities of the Foundation;

(D) evaluate the performance of the Executive Director; and

(E) actively solicit and accept funds, gifts, grants, devises, or bequests of real or personal property to the Foundation, including from private entities.

(7) BYLAWS.—

(A) IN GENERAL.—The bylaws established under paragraph (6)(A) may include—

(i) policies for the selection of Board members, officers, employees, agents, and contractors of the Foundation;

(ii) policies, including ethical standards, for—

(I) the acceptance, solicitation, and disposition of donations and grants to the Foundation, including appropriate limits on the ability of donors to designate, by stipulation or restriction, the use or recipient of donated funds; and

(II) the disposition of assets of the Foundation;

(iii) policies that subject all employees, fellows, trainees, and other agents of the Foundation (including members of the Board) to conflict of interest standards; and

(iv) the specific duties of the Executive Director.

(B) REQUIREMENTS.—The Board shall ensure that the bylaws of the Foundation and the activities carried out under those bylaws shall not—

(i) reflect unfavorably on the ability of the Foundation to carry out activities in a fair and objective manner; or

(ii) compromise, or appear to compromise, the integrity of any governmental agency or program, or any officer or employee employed by, or involved in, a governmental agency or program.

(8) COMPENSATION.—

(A) IN GENERAL.—No member of the Board shall receive compensation for serving on the Board.

(B) CERTAIN EXPENSES.—In accordance with the bylaws of the Foundation, members of the Board may be reimbursed for travel expenses, including per diem in lieu of subsistence, and other necessary expenses incurred in carrying out the duties of the Board.

(c) PURPOSE.—The purpose of the Foundation is to increase private and philanthropic sector investments that support efforts to create, develop, and

commercialize innovative technologies that address crosscutting national energy challenges by methods that include—

(1) fostering collaboration and partnerships with researchers from the Federal Government, State governments, institutions of higher education, federally funded research and development centers, industry, and nonprofit organizations for the research, development, or commercialization of transformative energy and associated technologies;

(2)(A) strengthening regional economic development through scientific and energy innovation; and

(B) disseminating lessons learned from that development to foster the creation and growth of new regional energy innovation clusters;

(3) promoting new product development that supports job creation;

(4) administering prize competitions to accelerate private sector competition and investment; and

(5) supporting programs that advance technologies from the prototype stage to a commercial stage.

(d) ACTIVITIES.—

(1) STUDIES, COMPETITIONS, AND PROJECTS.—The Foundation may conduct and support studies, competitions, projects, and other activities that further the purpose of the Foundation described in subsection (c).

(2) FELLOWSHIPS AND GRANTS.—

(A) IN GENERAL.—The Foundation may award fellowships and grants for activities relating to research, development, demonstration, maturation, or commercialization of energy and other Department-supported technologies.

(B) FORM OF AWARD.—A fellowship or grant under subparagraph (A) may consist of a stipend, health insurance benefits, funds for travel, and funds for other appropriate expenses.

(C) SELECTION.—In selecting a recipient for a fellowship or grant under subparagraph (A), the Foundation—

(i) shall make the selection based on the technical and commercialization merits of the proposed project of the potential recipient; and

(ii) may consult with a potential recipient regarding the ability of the potential recipient to carry out various projects that would further the purpose of the Foundation described in subsection (c).

(D) NATIONAL LABORATORIES.—A National Laboratory that applies for or accepts a grant under subparagraph (A) shall not be considered to be engaging in a competitive process.

(3) ACCESSING FACILITIES AND EXPERTISE.—The Foundation may work with the Department—

(A) to leverage the capabilities and facilities of National Laboratories to commercialize technology; and

(B) to assist with resources, including through the development of internet websites that provide information on the capabilities and facilities of each National Laboratory relating to the commercialization of technology.

(4) TRAINING AND EDUCATION.—The Foundation may support programs that provide commercialization training to researchers, scientists, and other relevant personnel at National Laboratories and institutions of higher education to help commercialize federally funded technology.

(5) MATURATION FUNDING.—The Foundation shall support programs that provide maturation funding to researchers to advance the technology of those researchers for the purpose of moving products from a prototype stage to a commercial stage.

(6) STAKEHOLDER ENGAGEMENT.—The Foundation shall convene, and may consult with, representatives from the Department,

institutions of higher education, National Laboratories, the private sector, and commercialization organizations to develop programs for the purpose of the Foundation described in subsection (c) and to advance the activities of the Foundation.

(7) INDIVIDUAL LABORATORY FOUNDATIONS PROGRAM.—

(A) DEFINITION OF INDIVIDUAL LABORATORY FOUNDATION.—In this paragraph, the term “Individual Laboratory Foundation” means a Laboratory Foundation established by a National Laboratory.

(B) SUPPORT.—The Foundation shall provide support to and collaborate with Individual Laboratory Foundations.

(C) GUIDELINES AND TEMPLATES.—For the purpose of providing support under subparagraph (B), the Secretary shall establish suggested guidelines and templates for Individual Laboratory Foundations, including—

(i) a standard adaptable organizational design for the responsible management of an Individual Laboratory Foundation;

(ii) standard and legally tenable bylaws and money-handling procedures for Individual Laboratory Foundations; and

(iii) a standard training curriculum to orient and expand the operating expertise of personnel employed by an Individual Laboratory Foundation.

(D) AFFILIATIONS.—Nothing in this paragraph requires—

(i) an existing Individual Laboratory Foundation to modify current practices or affiliate with the Foundation; or

(ii) an Individual Laboratory Foundation to be bound by charter or corporate bylaws as permanently affiliated with the Foundation.

(8) SUPPLEMENTAL PROGRAMS.—The Foundation may carry out supplemental programs—

(A) to conduct and support forums, meetings, conferences, courses, and training workshops consistent with the purpose of the Foundation described in subsection (c);

(B) to support and encourage the understanding and development of—

(i) data that promotes the translation of technologies from the research stage, through the development and maturation stage, and ending in the market stage; and

(ii) policies that make regulation more effective and efficient by leveraging the technology translation data described in clause (i) for the regulation of relevant technology sectors;

(C) for writing, editing, printing, publishing, and vending books and other materials relating to research carried out under the Foundation and the Department; and

(D) to conduct other activities to carry out and support the purpose of the Foundation described in subsection (c).

(9) EVALUATIONS.—The Foundation shall support the development of an evaluation methodology, to be used as part of any program supported by the Foundation, that shall—

(A) consist of qualitative and quantitative metrics; and

(B) include periodic third party evaluation of those programs and other activities of the Foundation.

(10) COMMUNICATIONS.—The Foundation shall develop an expertise in communications to promote the work of grant and fellowship recipients under paragraph (2), the commercialization successes of the Foundation, opportunities for partnership with the Foundation, and other activities.

(e) ADMINISTRATION.—

(1) EXECUTIVE DIRECTOR.—The Board shall hire an Executive Director of the Foundation, who shall serve at the pleasure of the Board.

(2) ADMINISTRATIVE CONTROL.—No member of the Board, officer or employee of the Foundation or of any program established by the Foundation, or participant in a program established by the Foundation, shall exercise administrative control over any Federal employee.

(3) STRATEGIC PLAN.—Not later than 1 year after the date of enactment of this Act, the Foundation shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a strategic plan that contains—

(A) a plan for the Foundation to become financially self-sustaining in fiscal year 2022 and thereafter (except for the amounts provided each fiscal year under subsection (l)(1)(C));

(B) a forecast of major crosscutting energy challenge opportunities, including short- and long-term objectives, identified by the Board, with input from communities representing the entities and areas, as applicable, described in subsection (b)(2)(B)(ii);

(C) a description of the efforts that the Foundation will take to be transparent in the processes of the Foundation, including processes relating to—

(i) grant awards, including selection, review, and notification;

(ii) communication of past, current, and future research priorities; and

(iii) solicitation of and response to public input on the opportunities identified under subparagraph (B); and

(D) a description of the financial goals and benchmarks of the Foundation for the following 10 years.

(4) ANNUAL REPORT.—Not later than 1 year after the date on which the Foundation is established, and every 2 years thereafter, the Foundation shall submit to the Committee on Energy and Natural Resources of the Senate, the Committee on Science, Space, and Technology of the House of Representatives, and the Secretary a report that, for the year covered by the report—

(A) describes the activities of the Foundation and the progress of the Foundation in furthering the purpose of the Foundation described in subsection (c);

(B) provides a specific accounting of the source and use of all funds made available to the Foundation to carry out those activities;

(C) describes how the results of the activities of the Foundation could be incorporated into the procurement processes of the General Services Administration; and

(D) includes a summary of each evaluation conducted using the evaluation methodology described in subsection (d)(9).

(5) EVALUATION BY COMPTROLLER GENERAL.—Not later than 5 years after the date on which the Foundation is established, the Comptroller General of the United States shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives—

(A) an evaluation of—

(i) the extent to which the Foundation is achieving the mission of the Foundation; and

(ii) the operation of the Foundation; and

(B) any recommendations on how the Foundation may be improved.

(6) AUDITS.—The Foundation shall—

(A) provide for annual audits of the financial condition of the Foundation; and

(B) make the audits, and all other records, documents, and papers of the Foundation, available to the Secretary and the Comptroller General of the United States for examination or audit.

(7) SEPARATE FUND ACCOUNTS.—The Board shall ensure that any funds received under subsection (l)(1) are held in a separate account from any other funds received by the Foundation.

(8) INTEGRITY.—

(A) IN GENERAL.—To ensure integrity in the operations of the Foundation, the Board shall develop and enforce procedures relating to standards of conduct, financial disclosure statements, conflicts of interest (including recusal and waiver rules), audits, and any other matters determined appropriate by the Board.

(B) FINANCIAL CONFLICTS OF INTEREST.—Any individual who is an officer, employee, or member of the Board is prohibited from any participation in deliberations by the Foundation of a matter that would directly or predictably affect any financial interest of—

(i) the individual;

(ii) a relative (as defined in section 109 of the Ethics in Government Act of 1978 (5 U.S.C. App.)) of that individual; or

(iii) a business organization or other entity in which the individual has an interest, including an organization or other entity with which the individual is negotiating employment.

(9) INTELLECTUAL PROPERTY.—The Board shall adopt written standards to govern the ownership and licensing of any intellectual property rights developed by the Foundation or derived from the collaborative efforts of the Foundation.

(10) LIABILITY.—The United States shall not be liable for any debts, defaults, acts, or omissions of the Foundation nor shall the full faith and credit of the United States extend to any obligations of the Foundation.

(11) NONAPPLICABILITY OF FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Foundation.

(f) DEPARTMENT COLLABORATION.—

(1) NATIONAL LABORATORIES.—The Secretary shall collaborate with the Foundation to develop a process to ensure collaboration and coordination between the Department, the Foundation, and National Laboratories—

(A) to streamline contracting processes between National Laboratories and the Foundation, including by—

(i) streamlining the ability of the Foundation to transfer equipment and funds to National Laboratories;

(ii) standardizing contract mechanisms to be used by the Foundation; and

(iii) streamlining the ability of the Foundation to fund endowed positions at National Laboratories;

(B) to allow a National Laboratory or site of a National Laboratory—

(i) to accept and perform work for the Foundation, consistent with provided resources, notwithstanding any other provision of law governing the administration, mission, use, or operations of the National Laboratory or site, as applicable; and

(ii) to perform that work on a basis equal to other missions at the National Laboratory; and

(C) to permit the director of any National Laboratory or site of a National Laboratory to enter into a cooperative research and development agreement or negotiate a licensing agreement with the

Foundation pursuant to section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

(2) DEPARTMENT LIAISONS.—The Secretary shall appoint liaisons from across the Department to collaborate and coordinate with the Foundation.

(3) ADMINISTRATION.—The Secretary shall leverage appropriate arrangements, contracts, and directives to carry out the process developed under paragraph (1).

(g) NATIONAL SECURITY.—Nothing in this section exempts the Foundation from any national security policy of the Department.

(h) SUPPORT SERVICES.—The Secretary shall provide facilities, utilities, and support services to the Foundation if it is determined by the Secretary to be advantageous to the research programs of the Department.

(i) PREEMPTION OF AUTHORITY.—This section shall not preempt any authority or responsibility of the Secretary under any other provision of law.

(j) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There are authorized to be appropriated—

(A) to the Secretary, not less than \$1,500,000 for fiscal year 2021 to establish the Foundation;

(B) to the Foundation, not less than \$30,000,000 for fiscal year 2021 to carry out the activities of the Foundation; and

(C) to the Foundation, not less than \$3,000,000 for fiscal year 2022, and each fiscal year thereafter, for administrative and operational costs.

(2) COST SHARE.—Funds made available under paragraph (1)(B) shall be required to be cost-shared by a partner of the Foundation other than the Department.